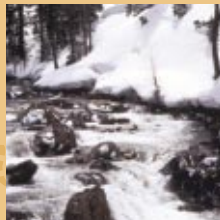


*Briefing Book September 2001*



CALFED  
BAY-DELTA  
PROGRAM





*The mission of the CALFED*



## Mission Statement

*Bay-Delta Program is to develop*

*and implement a long-term*

*comprehensive plan that will*

*restore ecological health and*

*improve water management for*

*beneficial uses of the Bay-Delta.*

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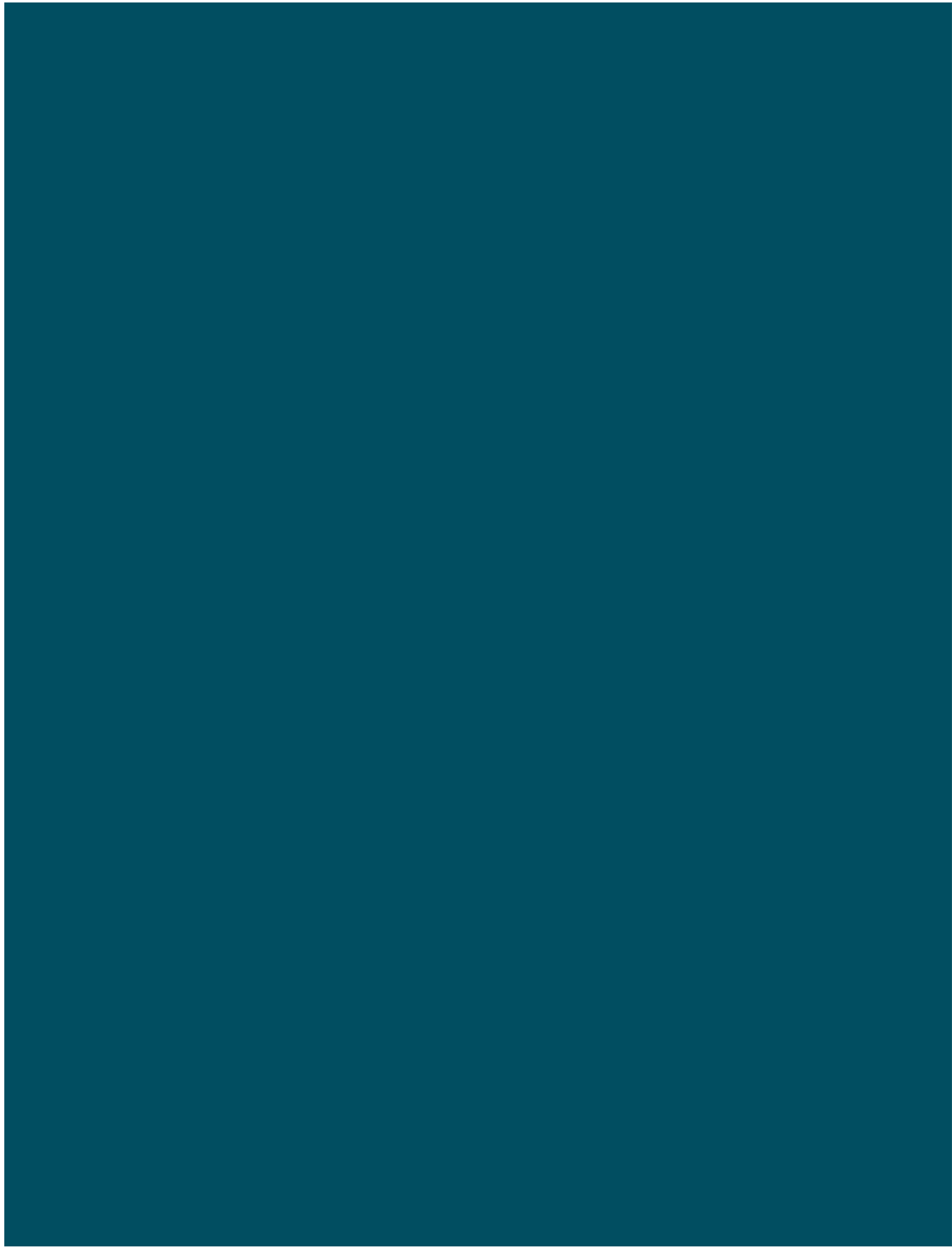
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## TAB 1 Regional Approach

## TAB 2 Funding



## CALFED AGENCIES

### CALIFORNIA

The Resources Agency

Department of Water Resources

Department of Fish and Game

The Reclamation Board

Delta Protection Commission

Department of Conservation

San Francisco Bay Conservation and  
Development Commission

California Environmental Protection Agency

State Water Resources Control Board

Department of Health Services

Department of Food and Agriculture

### FEDERAL

Department of the Interior

Bureau of Reclamation

Fish and Wildlife Service

Geological Survey

Bureau of Land Management

Environmental Protection Agency

Army Corps of Engineers

Department of Agriculture

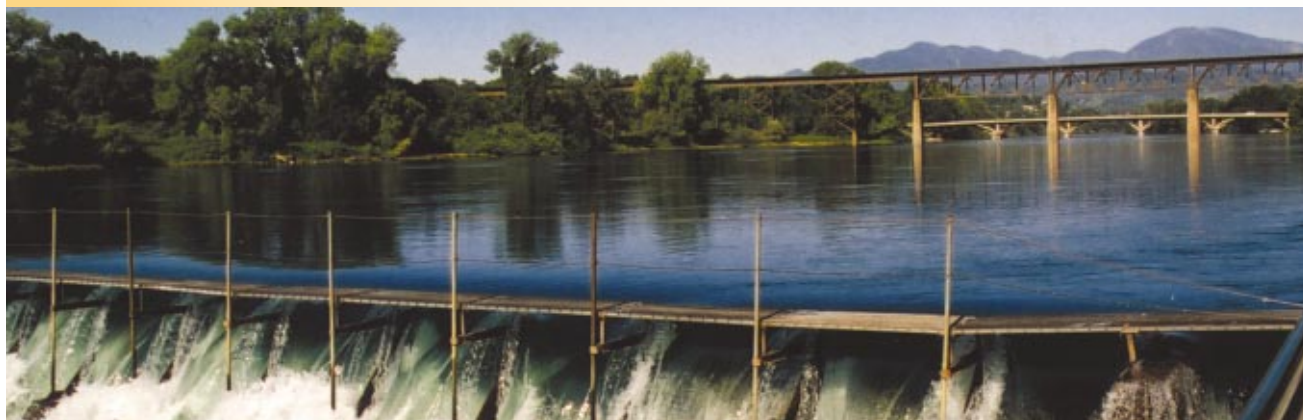
Natural Resources Conservation Service

Forest Service

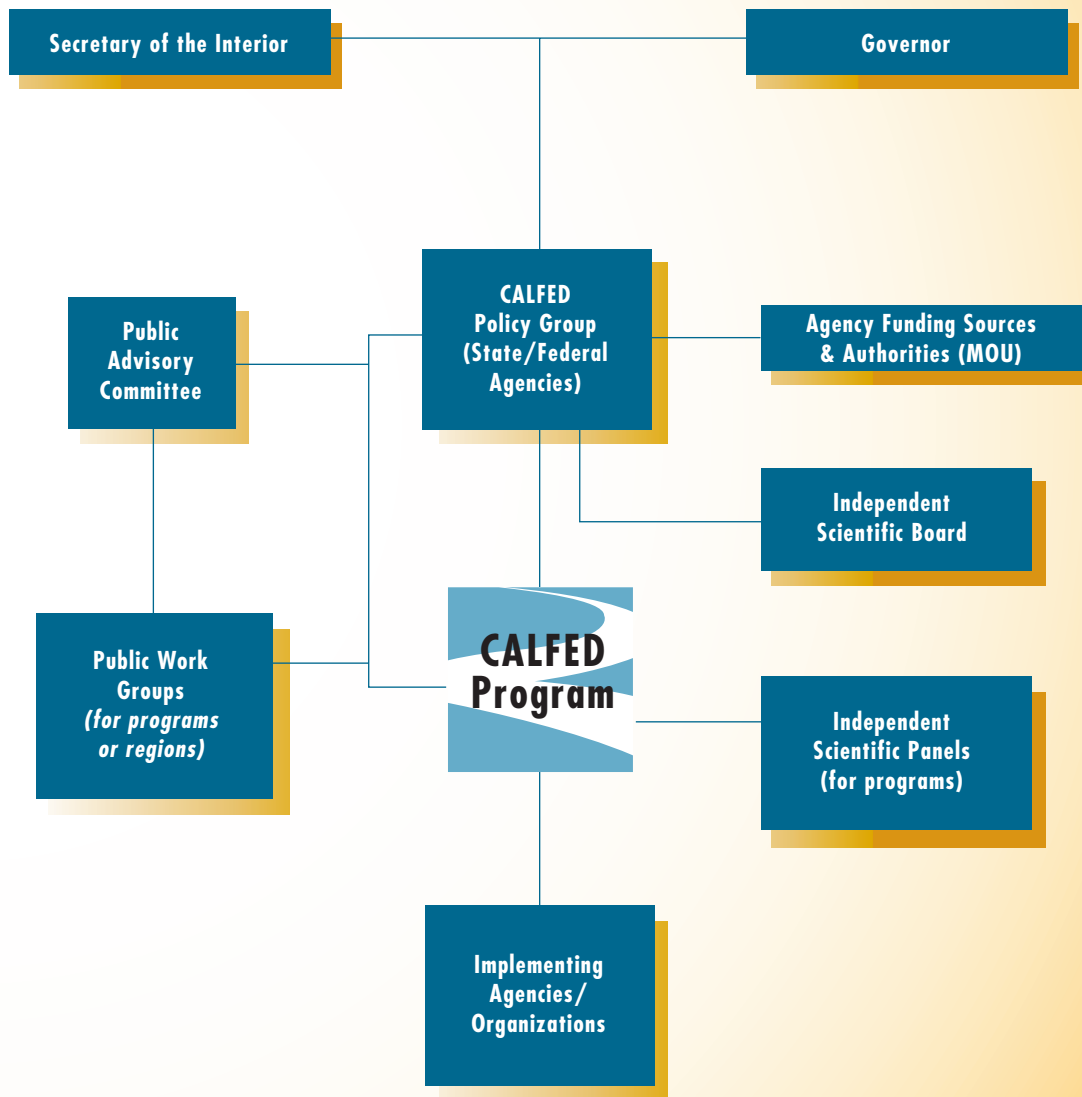
Department of Commerce

National Marine Fisheries Service

Western Area Power Administration



## CALFED INTERIM GOVERNANCE STRUCTURE





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# PROGRAM SUMMARY

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September 2001



CALFED  
BAY-DELTA  
PROGRAM





## Who Depends on the Bay-Delta? We all do.

The Bay-Delta provides drinking water for 22 million people. It supports California's trillion-dollar economy, including its \$27 billion agricultural industry, and local homes and infrastructure. It is the largest estuary on the west coast - home to 750 plant and animal species - and it supports 80 percent of the state's commercial salmon fisheries.

## Defining the Bay-Delta Conflict

---



- California's Bay-Delta is an ecosystem in trouble.
  - Straining under dual roles as critical habitat and water project crossroads, the Bay-Delta is in decline from decades of competing demands.
  - Today, it no longer functions as a healthy ecosystem or as a reliable source of water.
- 
- Scores of species – including Chinook Salmon and steelhead trout – are in decline or endangered.
  - Water supplies are increasingly unreliable, jeopardizing the world's sixth largest economy and 7 million acres of unsurpassed agricultural lands.
  - Water quality continues to degrade, making it difficult and expensive to meet drinking water standards.

## CALFED BAY-DELTA PROGRAM

### Timeline

**Dec 15, 1994**

*Bay-Delta Accord*

**November 1996**

*Prop 204 Funds Approved  
by Voters*

**March 2000**

*Prop 13 Funds  
Approved by Voters*

**June 9, 2000**

*Framework Announced*

**July 1, 2000  
Year 1 Funding**

*State \$528.1 million  
Federal \$78.0 million  
Other \$221.0 million  
**Unmet Needs  
\$77.7 million***

**July 21, 2000**

*Programmatic Environmental  
Document Finalized (EIS/EIR)*

*August 2, 2000*

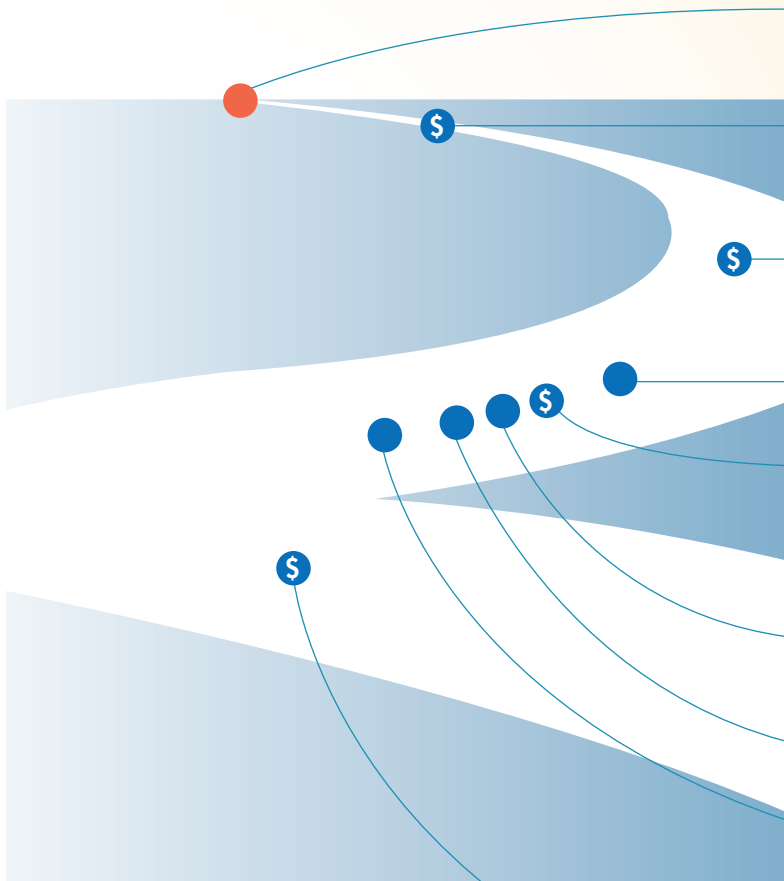
*Lead Scientist Selected*

**August 28, 2000**

*Record of Decision Signed;  
CALFED Program  
Implementation Begins*

**July 1, 2001  
Year 2 Funding  
Begins**

*State \$553.9 million  
**Federal and Unmet  
Needs \$370.0 million**  
Other \$33.5 million*



## A Balanced Approach

Launched last summer with broad public support, the Bay-Delta Plan is a balanced, comprehensive approach to reduce conflicts over limited water supplies and to address the state's long-term water needs.

The Bay-Delta Plan is unique in its approach to solving California's environmental and water problems. The Bay-Delta solutions address four interrelated, interdependent program areas concurrently:



### Water Supply Reliability

- Potentially increase California water supplies by nearly 3 million acre-feet through surface and groundwater storage and water use efficiency projects.
- Develop tools to establish an Environmental Water Account to provide water supply reliability, and increase deliveries by 15 percent to water-short federal contractors in the San Joaquin Valley.
- Costs: \$5.5 billion in Stage 1 (first seven years of implementation).



### Ecosystem Restoration

- Protect and restore species throughout the Bay-Delta system to meet recovery goals and mandates.
- Develop an annual grant program to support locally and regionally based projects.
- Costs: \$1.6 billion in Stage 1.



### Water Quality

- Improve drinking water supplies for the 22 million Californians who rely on Delta water.
- Invest in conveyance improvements, watershed and agricultural drainage projects, and treatment technologies.
- Costs: \$1 billion in Stage 1.



### Levee System Integrity

- Improve stability of Delta levees that protect the state's water supply, and reduce conflicts between levee maintenance and habitat needs.
- Costs: \$ 500 million in Stage 1.

The Program goals are implemented through 11 major Program elements.



## An Unprecedented Scope and Vision



Fund projects in multiple watersheds encompassing more than 40,000 square miles – more than 70 percent of California's land.



A coordinated approach by more than 20 state and federal agencies.



Eleven major program elements supporting multiple objectives.



Extensive public and local involvement in shaping each program element.



Unprecedented commitment to independent scientific review, planning and tracking.

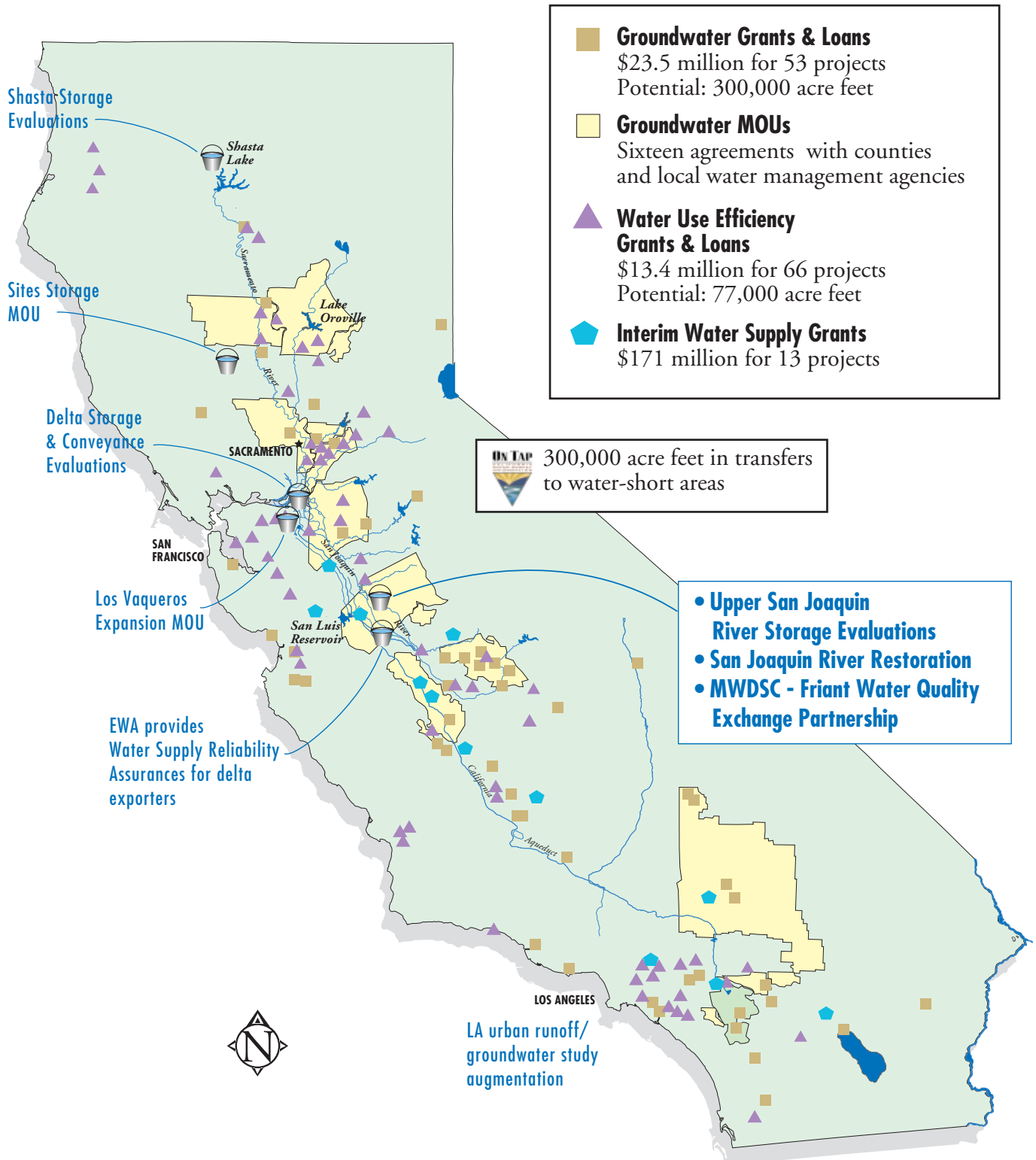
## First Year Major Accomplishments

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After five years of planning and public input, the Bay-Delta Program is now delivering on its promise. In the Program's first year, the agencies have:

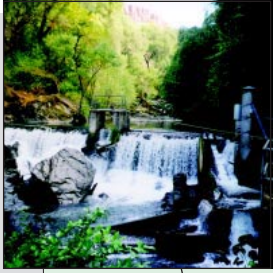
- Allocated more than \$300 million from Proposition 13 and other sources to local agencies for water supply and water quality projects throughout the state.
- Allocated more than \$150 million for ecosystem restoration programs to protect and restore our depleted fisheries.
- Signed agreements with local partners to plan for major surface storage and groundwater projects in the Bay Area, the Sacramento Valley, and other regions.
- Developed a Drought Contingency Plan and made available 300,000 acre-feet of water this year to areas suffering from shortages.
- Launched an innovative Environmental Water Account to set aside water for fish without reducing allocations to farms and cities. For the first time ever, endangered fish received water flows well above existing regulatory requirements, and farmers received assurances that their supplies would not be further reduced because of Endangered Species Act requirements.
- Developed grant programs for local agencies to address drinking water quality, water conservation, groundwater management, and watershed protection projects throughout the state.
- Launched a rigorous effort to apply performance standards and independent scientific review to all major elements of the Program.

## 2000-2001 CALFED WATER MANAGEMENT STRATEGY HIGHLIGHTS



## CALFED MULTIPLE YEAR ECOSYSTEM RESTORATION & WATERSHED HIGHLIGHTS

### WATERSHED RESTORATION



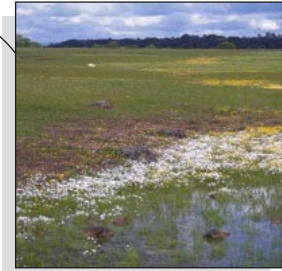
### FISH PASSAGE



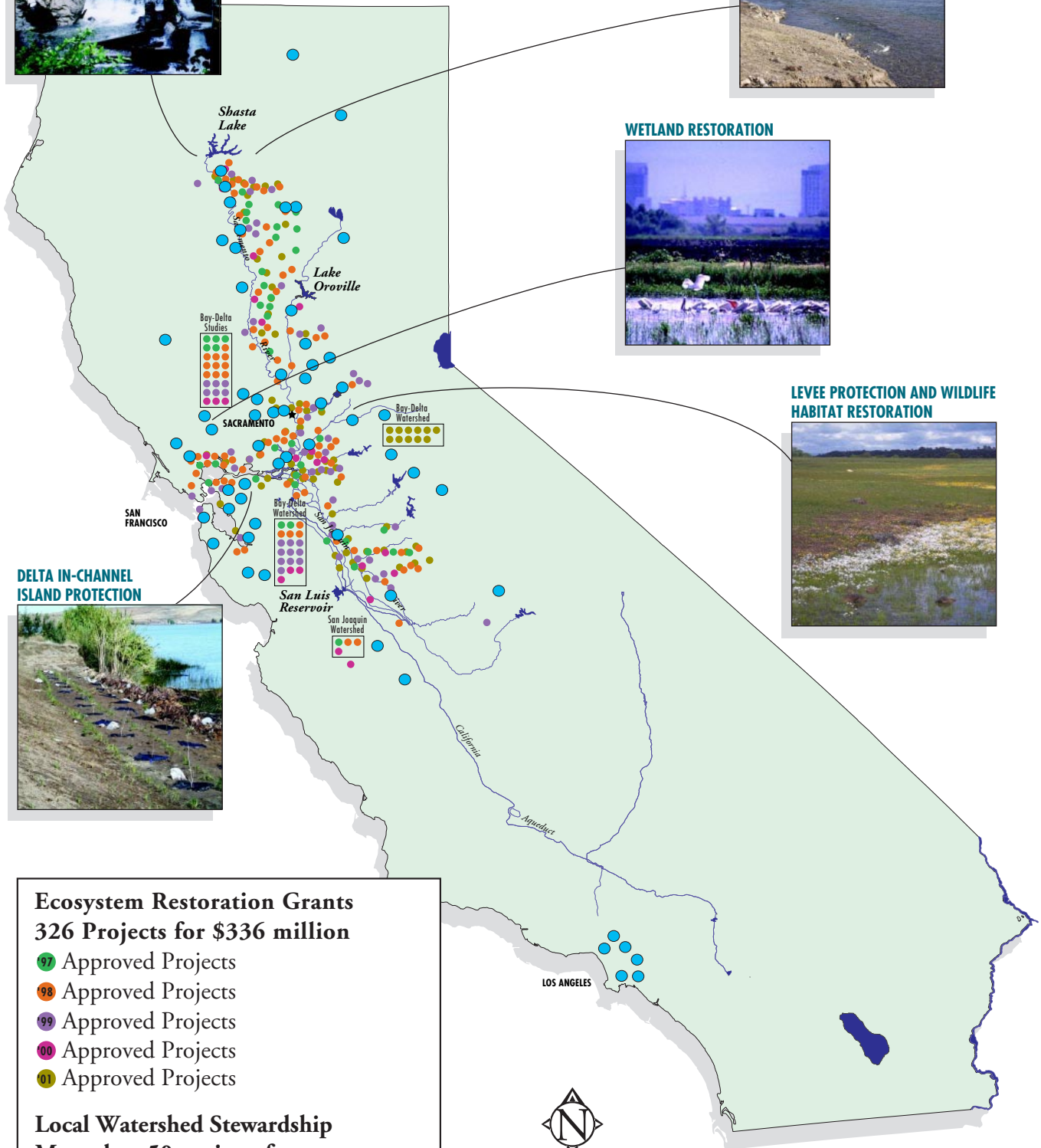
### WETLAND RESTORATION



### LEVEE PROTECTION AND WILDLIFE HABITAT RESTORATION



### DELTA IN-CHANNEL ISLAND PROTECTION



### Ecosystem Restoration Grants 326 Projects for \$336 million

- 97 Approved Projects
- 98 Approved Projects
- 99 Approved Projects
- 00 Approved Projects
- 01 Approved Projects

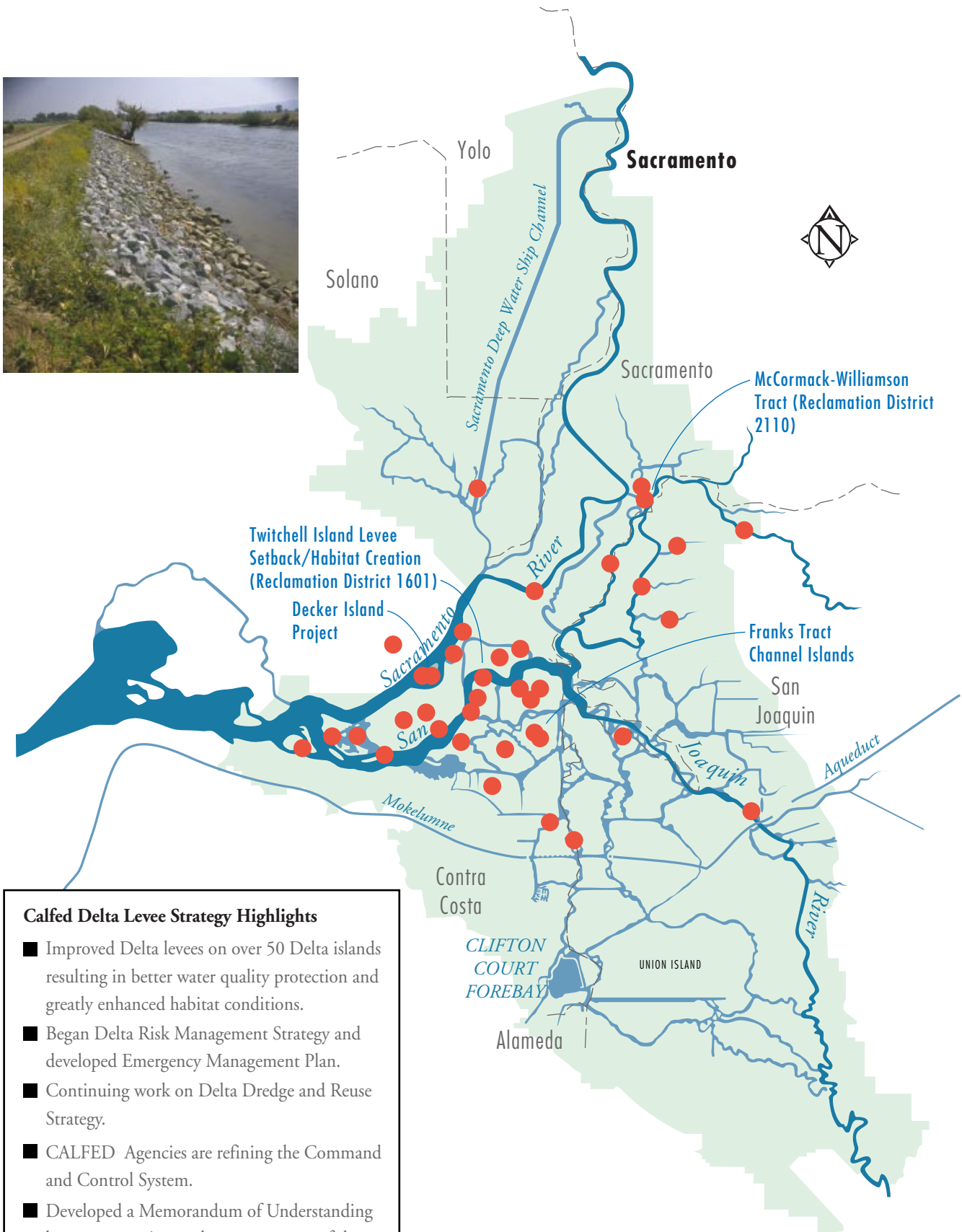
### Local Watershed Stewardship More than 50 projects for approx. \$19 million

- 01 Approved Projects

## 2000-2001 CALFED WATER QUALITY HIGHLIGHTS



## 2000-2001 CALFED DELTA LEVEE PROJECTS



### Calfed Delta Levee Strategy Highlights

- Improved Delta levees on over 50 Delta islands resulting in better water quality protection and greatly enhanced habitat conditions.
- Began Delta Risk Management Strategy and developed Emergency Management Plan.
- Continuing work on Delta Dredge and Reuse Strategy.
- CALFED Agencies are refining the Command and Control System.
- Developed a Memorandum of Understanding between agencies on the management of the levee program.

## Funding Outlook

The Program's extraordinary progress in the first year was made possible because California voters saw the wisdom of investing in California's water future through the passage of Propositions 204 and 13 in 1996 and in 2000. Last year, the state allocated over \$500 million to the Bay-Delta Program, and Governor Davis has proposed allocating over \$500 million again this coming year.

The Program also needs significant federal funding to meet its objectives and maintain a strong state/federal partnership. The Program calls for a \$3 billion commitment from the federal government to match the state and local share during the first seven-year stage. Without these funds, many key elements of the Plan will be significantly delayed or cancelled.

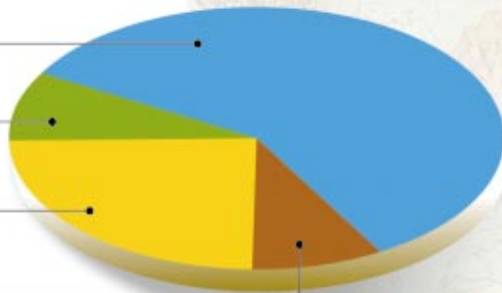
### Year 1 Funding

State  
\$528.1 million

Federal  
\$78.0 million

User/Local  
\$221.0 million

Unmet Needs  
\$77.7 million

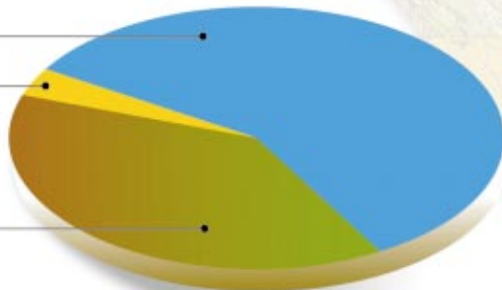


### Year 2 Funding

State  
\$553.9 million

User/Local  
\$33.5 million

Federal and  
Unmet Needs  
\$370 million



## Implementation Priorities

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- Meet milestones and commitments in the Bay-Delta Plan
- Support local and regionally based strategies to achieve the Program's goals
- Apply independent scientific review and adaptive management to all major activities
- Develop performance standards and milestones for each program element
- Conduct early and continuous agency, stakeholder and public involvement
- Report accurately and frequently to the public
- Maintain a balanced and integrated Program



## Shaping the Solution through Partnerships

Vast and sustained levels of public involvement have shaped every aspect of the Calfed Bay-Delta Program.

Partnerships with local communities and groups are being forged to combine resources, share knowledge and resolve problems at the local, regional and state level.

### Shaping the Solution

*The Calfed Bay-Delta Program provides for public involvement in shaping solutions across all issue areas.*



- Scoping Meetings
- Technical Workshops
- The Bay-Delta Advisory Council and Related work Group Meetings
- Media Events
- Annual Reports
- Newsletters
- Coordinate with Local Groups
- Environmental Justice
- Brochures
- Briefing Materials
- Comprehensive Web Site  
<http://calfed.ca.gov>
- Toll-free Public Information Telephone Line  
(800) 700-5752
- Presentations
- Technical Documents
- Tribal Participation

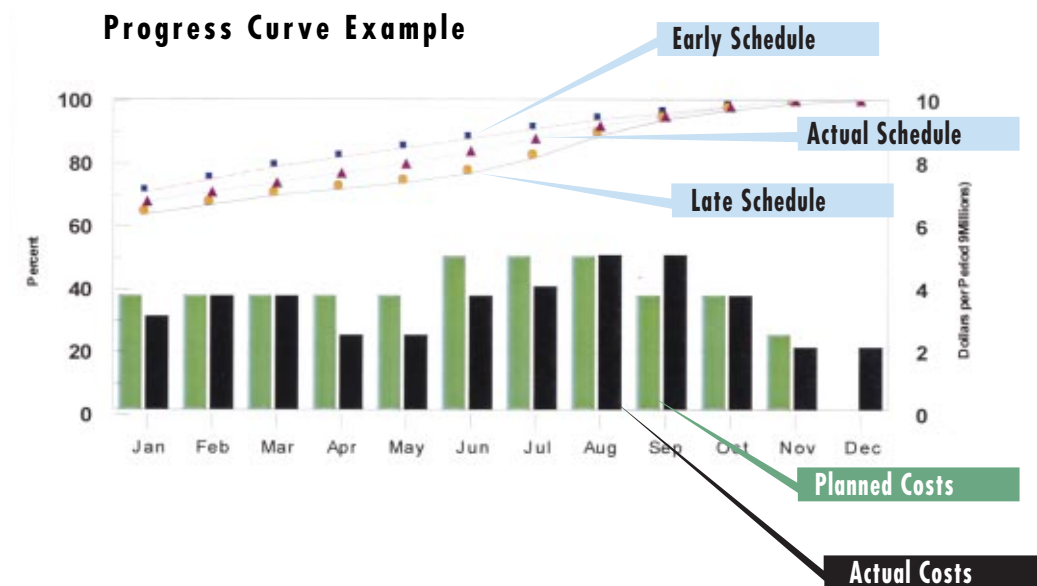
## Providing Accountability to the Public

CALFED is using sophisticated technology to track its progress and provide maximum accountability to the public.

Meaningful updates on the progress, cost and timeline of each project and action will be communicated to Congress, the Legislature, stakeholders and the public.

CALFED will use performance measures to:

- Evaluate goals, progress and successes of restoration and management efforts.
- Increase technical understanding of problems and trends in the Bay-Delta system.
- Provide information that can help clarify management decisions.
- Inform the public and policy makers about the progress of the program.



*This is one example showing how progress, cost, and timelines will be tracked for public accountability. Optimal schedule performance falls between early and late schedules, as seen above.*



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## PROGRAM ELEMENTS

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## Program Elements

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### Water Management Program

Recognizing that no single strategy will resolve California's water and environmental problems, CALFED encompasses an array of projects and approaches to expand water supplies and ensure efficient use of the resource.

Working with local and regional agencies, the Program has identified actions that could increase California water supplies by nearly 3 million-acre feet over the next 10 years – enough water to meet the needs of 6 million families annually.

#### Goals:

- Maximize use of available water supplies through conservation, water recycling and water quality improvements.
- Increase the operational flexibility of water systems at the state and local level through strategic improvements in conveyance and storage capacities.
- Develop groundwater and surface water storage projects to boost flexibility and provide additional supplies for agricultural, urban, and environmental use.

#### Accomplishments:

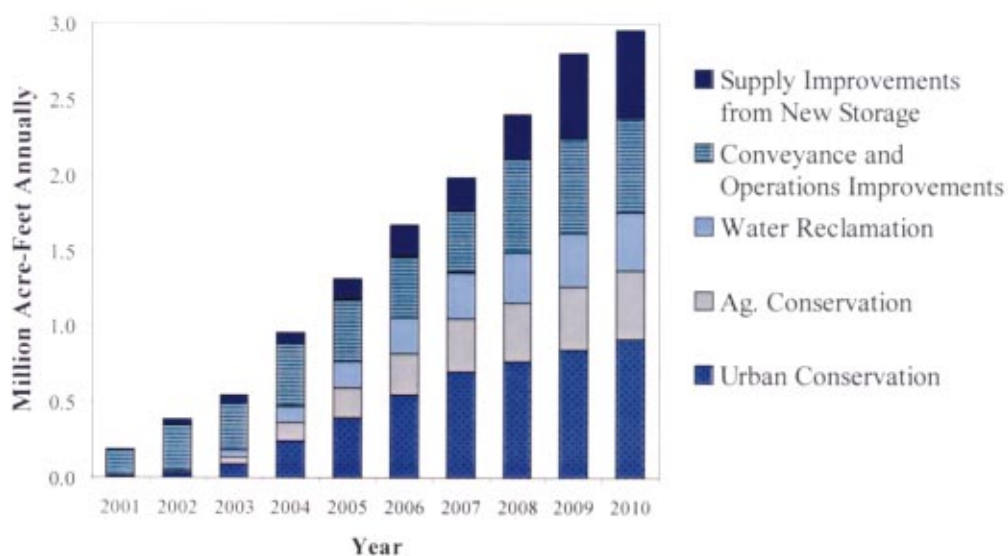
- Provided more than \$300 million to local agencies for irrigation system improvements, groundwater recharge, conjunctive-use projects, conservation and recycling.
- Developed a Drought Contingency Plan, and made available over 300,000 acre-feet to agricultural areas in the San Joaquin Valley.
- Funded groundwater monitoring, feasibility and pilot projects valued at more than \$14 million.
- Developed a comprehensive Operations Plan to coordinate actions and assure water supply reliability.
- Developed a Water Management Strategy Evaluation Framework to help policy makers and stakeholders identify and select specific projects, facilities and actions consistent with Program objectives.

#### Public and Peer Review:

- Overview by stakeholders and review through the state's Drought Contingency Plan and the Water Management Strategy Evaluation Framework.

## Performance and Tracking

Performance is tracked by overall increases in yields and the flexibility of the state's water system through the four elements that make up the strategy: storage, conveyance, water use efficiency, and water transfers. Water supply reliability will be a key element in tracking results of the Program.



*Partnerships with local and regional agencies to jointly implement water management programs and actions could increase California water supplies by nearly 3 million-acre feet over the next 10 years – enough water to meet the needs of 6 million families for a year.*

## Potential Improvements in Water Supply Reliability

Water Management Action	Acre-Feet/year
<b>Water Use Efficiency (first 7 years)</b>	
Urban Conservation	520,000 to 690,000
Agricultural Conservation	260,000 to 350,000
Water Reclamation	255,000 to 310,000
<b>Potential Increase from Water Use Efficiency</b>	<b>Up to 1.4 Million Acre-Feet/year</b>
<b>Conveyance and Operational Improvements</b>	
Includes: SWP Pumping of (b)(2) Upstream Releases, Export/Inflow Ratio Flexibility, Increased Banks Pumping Plant Capability, Joint Point of Diversion, and San Luis Bypass	
<b>Potential Increase from New Storage</b>	<b>600,000 to 900,000 Acre-Feet/year*</b>
<b>Total Potential Increase in Water Supply Reliability from Water Use Efficiency, Conveyance and Operations Improvements, and New Storage:</b>	<b>Up to 2.9 Million Acre-Feet/year</b>

### \* Storage Capacity versus Water Supply Reliability

Total increase in storage capacity is not a direct measure of increased water supply reliability. The estimate of increased water supply reliability provided here is the quantity of water expected to be available annually from new storage during extended dry periods.

New storage capacity would also be used to provide improved flows and reduced effects of diversions for fish, improved water quality, and improved conjunctive management of surface and groundwater.

## Potential New Storage Capacity\*

CALFED Storage Projects	Acre-Feet
Enlarge Shasta Lake	300,000
Enlarge Los Vaqueros Reservoir	400,000
In-Delta Storage	250,000
Sites Reservoir	1,800,000
Upper San Joaquin River Storage	250,000 to 700,000
Groundwater Storage and Conjunctive Use	500,000 to 1,000,000
<b>Total Potential New Storage</b>	<b>4.5 Million Acre-Feet</b>

## Storage

By pursuing more water storage capacity in both surface reservoirs and underground aquifers, CALFED seeks not only to meet the needs of California's growing population, but also to provide much-needed flexibility to improve water quality and restore ecosystems.

### Goals:

- To provide financial and technical assistance to implement 1/2 million to one million acre-feet of new, locally managed groundwater storage.
- Pursue specific opportunities for new off-stream storage sites and expansion of existing on-stream storage sites as identified in the Record of Decision.

### Accomplishments:

- Launched the Integrated Storage Investigations (ISI) to coordinate studies and evaluate the costs and benefits of specific storage projects in terms of water quality, water supply reliability and ecosystem restoration.
- Signed an agreement with local partners to study the Sites Reservoir off-stream surface storage project.
- Signed a Memorandum of Understanding to launch studies to evaluate the expansion of Los Vaqueros Reservoir.
- Provided grants and loans to local agencies totaling more than \$23 million to assist in planning and implementing groundwater projects. The projects will improve statewide operational flexibility and increase water supply reliability.
- Completed 16 Memoranda of Understanding with local agencies to study groundwater storage improvements throughout the state.

### Public and Peer Review:

- Conjunctive-Use Advisory Teams
- Public workshops, partnerships and stakeholder meetings

### Performance and Tracking

Storage is part of the larger Water Management Strategy, and will increase the availability of water and improve the flexibility of the system. Performance measures for this may include evaluation of changes in groundwater levels, groundwater overdraft status, volume of new surface storage and groundwater capacity.

## In-Delta Storage

Project	Potential Storage (acre-feet)	Environmental Review completion date
In-Delta Storage	250,000	December 2002

## Description

An In-Delta Storage facility of 250,000 acre-feet would provide both fishery benefits and enhanced water project flexibility.

Milestones	Schedule
Select project alternative and initiate negotiation with Delta Wetlands owners or other appropriate landowners for acquisition of necessary property.	December 2001
Develop project plan that addresses local concerns about effects on neighboring lands and complete any additional environmental documentation.	July 2002
Complete environmental review and documentation, obtain necessary authorization and funding, and begin construction by the end of 2002.	December 2002

## Agency Roles

The Department of Water Resources is the lead agency for the feasibility study and CEQA compliance. The Bureau of Reclamation is the lead agency for the NEPA compliance.

## Authority

This project is authorized under the Integrated Storage Investigations Program with funding from California's General Fund. As an active participant in CALFED, Reclamation is seeking Federal authority to study options for additional storage that would support this program.

## Budget

	Fiscal Year 01	Fiscal Year 02	FY 02 Capability
Federal	\$250,000	0	\$1,825,000
State	\$2,300,000	\$2,200,000	\$2,200,000

## Los Vaqueros Enlargement

Project	Potential Storage (acre-feet)	Environmental Review completion date
Los Vaqueros Enlargement	400,000	December 2003

### Description

Expanding Los Vaqueros reservoir from 100,000 AF to 500,000 AF would provide water quality and water supply reliability benefits to Bay Area water users. Storage in this location could also be integrated into the Environmental Water Account. As an existing reservoir operated by the Contra Costa Water District, the reservoir is subject to a number of mandates and agreements. The Department of Water Resources and the Bureau of Reclamation will work with the district and interested stakeholders to assure that previous commitments, including local voter approval required for expansion, are respected.

Milestones	Schedule
Complete Feasibility Study.	July 2002
Complete environmental review, documentation and preliminary design on a selected alternative.	December 2003
Finalize agreements with project participants	July 2004
Obtain necessary authorizations and funding (including local voter approval)	December 2004
Begin construction.	December 2005

### Agency Roles

Reclamation is the lead federal agency for NEPA compliance as well as co-program manager. DWR, also a co-program manager, will be a co-lead for CEQA compliance. DWR is currently providing funds to Contra Costa Water District to prepare the feasibility study, and they will also be a “responsible agency” for fulfilling CEQA requirements.

### Authority

Reclamation is currently participating under the technical assistance authority provided in the Reclamation Act of 1902. However, additional authority will be required from Congress to conduct a feasibility study for the enlargement of Los Vaqueros. DWR’s participation is authorized under the State General Fund.

### Budget

	Fiscal Year 01 Actual	Fiscal Year 02 Budget	FY 02 Capability
Federal	\$100,000	\$0	\$2,500,000
State	\$600,000	\$270,000	1,500,000

## Shasta Enlargement

Project	Potential Storage (acre-feet)	Environmental review completion date
Shasta Enlargement	300,000	December 2004

## Description

An increase in Shasta storage capacity by 300,000 acre-feet would increase the pool of cold water available to maintain lower Sacramento River temperatures for fish and improve water supply reliability.

Milestones	Schedule
Complete feasibility study and preliminary design.	December 2003
Complete environmental review and documentation, obtain Federal authorization and funding and begin construction.	December 2004

## Agency roles

Reclamation is the lead agency for the feasibility study and NEPA compliance. The Department of Water Resources is the lead agency for CEQA compliance.

## Authority

This project is authorized under 1980 Public Law 96-375, which specifically grants authority to study enlargement of Shasta Dam and Reservoir. Authorization also exists under Public Law 102-575 to develop a least-cost plan to replace 800,000 acre-feet of yield reallocated to the environment. As an active participant in CALFED, Reclamation also has authority to study options for additional storage that would support this program.

## Budget

	Fiscal Year 01	Fiscal Year 02	FY02 Capability
Federal	\$ 1,000,000	\$0	\$ 6,000,000
State	\$500,000	\$170,000	\$170,000

## Sites Reservoir

Project	Potential Storage (acre-feet)	Environmental review completion date
Sites Reservoir	1,900,000	August 2004

## Description

This project could enhance water management flexibility in the Sacramento Valley and provide storage and operational benefits for other CALFED programs including fisheries protection, Delta water quality, and the EWA. The CALFED ROD indicates that, “expanding water storage capacity is critical to the successful implementation of all aspects of the CALFED Program.” Sites Reservoir was noted in the ROD as a program that requires “further consideration” or study evaluation during Stage 1. The ROD directs CALFED agencies to join with local partners to complete extensive technical work, significant additional environmental review, and development of cost-sharing agreements of a “Sites Reservoir” project.

Milestones	Schedule
Complete environmental review and planning documentation	August 2004

## Agency roles

The Department of Water Resources (DWR) is the lead agency for the feasibility study and CEQA compliance. Per the Sites MOU, the Bureau of Reclamation is the lead agency for NEPA compliance.

## Authority

Initial planning studies carried out by DWR were funded under Proposition 204. Recent authorization and funding have come from California’s General Fund. No federal authorization or appropriation currently exists.

## Budget

	Fiscal Year 01	Fiscal Year 02	FY02 Capability
Federal	\$0	\$0	\$1,000,000
State	\$8,100,000	\$ 4,550,000	\$6,550,000

## Conveyance

Moving water through the Bay-Delta as efficiently as possible will increase the system's flexibility and boost ecosystem health, water quality and levee stability.

### Goals:

- Modify the existing conveyance system for water supply, water quality, flood control and ecosystem benefits.
- Improve pumping operations of the State Water Project to increase reliability and enhance fish protection.

### Accomplishments:

- Begin construction of the Tracy Fish Test Facility to provide data on the effectiveness of screening facilities in the South Delta.
- Study plan for through-Delta diversion facility for Sacramento River.
- Work on the South Delta Improvement Program (SDIP) to install permanent fish and flow control structures, and modify Clifton Court Forebay to eventually increase periodic pumping to 10,300 cubic feet per second.
- Conduct operational studies to address fishery and water quality impacts of Delta Cross Channel modifications.
- Environmental documentation for North Delta Flood Control improvements.
- Feasibility studies for lower San Joaquin flood control improvement study.

### Public and Peer Review:

- Program review by North and South Delta Improvements Teams.
- Monitoring by North Delta Stakeholders Group and Mokelumne-Cosumnes Watershed Alliance.

### Performance and Tracking

Performance measures for the conveyance program may include overall survival rates for fish entering the Tracy Fish Test Facility. Increased survival rates mean fewer fish are being lost as a result of water project pumping. Other performance measures may be drinking water quality, flood protection, and ecosystem values.

## Water Use Efficiency

Through a competitive process that will fast-track water conservation and recycling projects, CALFED Bay-Delta Program aims to generate real water supply benefits in the short term.

### Goals:

- Reduce water demand and increase water supply.
- Improve water quality by reducing return flows and increasing instream flows.
- Improve ecosystem health by increasing in-stream flows.

### Accomplishments:

- Awarded \$13.3 million for 65 projects in 2001 - including 37 urban and 28 agricultural projects.
  - Urban projects range from a voucher incentive program for clothes washers to more efficient landscape water programs.
  - Funded projects will collectively save energy and 30,000 acre-feet of water and improve water quality.
- Made significant progress on establishing quantifiable objectives for agricultural water use.

### Public and Peer Review:

- Agricultural Steering Committee
- Urban Ad-hoc Committee
- Recycling Ad-hoc Committee

### Performance and Tracking

Performance measures may include evaluation of: progress toward meeting quantifiable goals for urban and agricultural efficiency; volume of water diverted for consumptive uses; volume of in-stream flows; in-stream water quality; and level of contaminants carried by return flows.

## Water Transfers

Through development of an effective water transfer market, CALFED aims to stretch existing water supplies by promoting transfers from willing sellers to buyers while protecting other water users, local economies and the environment.

### Goals:

- Develop a more effective water transfer market.
- Protect water rights, the environment, and local economic interests.
- Streamline the approval process of state and federal agencies for water transfers.

### Accomplishments:

- Developed a Drought Contingency Plan, and made available over 300,000 acre-feet this year to areas suffering from water shortages.
- Developed “On Tap” web site, an on-line water market information resource for water transfers.
- Convened a stakeholder panel to recommend ways to streamline the transfer process.
- Initiated technical review of “carriage water” requirements governing the transfer of water through the Bay-Delta.
- Working to define transferable water and carriage water requirements.

### Public and Peer Review:

- Monitor web site with Water Transfer Information Clearinghouse.
- Review by CALFED agencies and State Water Resources Control Board Water Transfer Work Group.

### Performance and Tracking

Performance measures may include: number of proposed water transfers; ratio between water transfers proposed and approved; volume of water being transferred; reduced time needed to approve proposed transfers; and total regional water supply.

## Ecosystem Restoration Program

Ecosystem restoration actions help restore and improve the health of the Bay-Delta system for all native species while reducing its water management constraints.

### Goals:

- Recover 19 at-risk native species and contribute to the recovery of 25 additional species.
- Rehabilitate natural processes related to hydrology, stream channels, sediment, floodplains and ecosystem water quality.
- Maintain and enhance populations of 14 species critical to commercial fisheries.
- Protect and restore functional habitats, including aquatic, upland and riparian, to allow species to thrive.
- Reduce the negative impacts of invasive species and prevent additional introductions that compete with and destroy native species.
- Improve and maintain water and sediment quality to better support ecosystem health and allow species to flourish.

### Accomplishments:

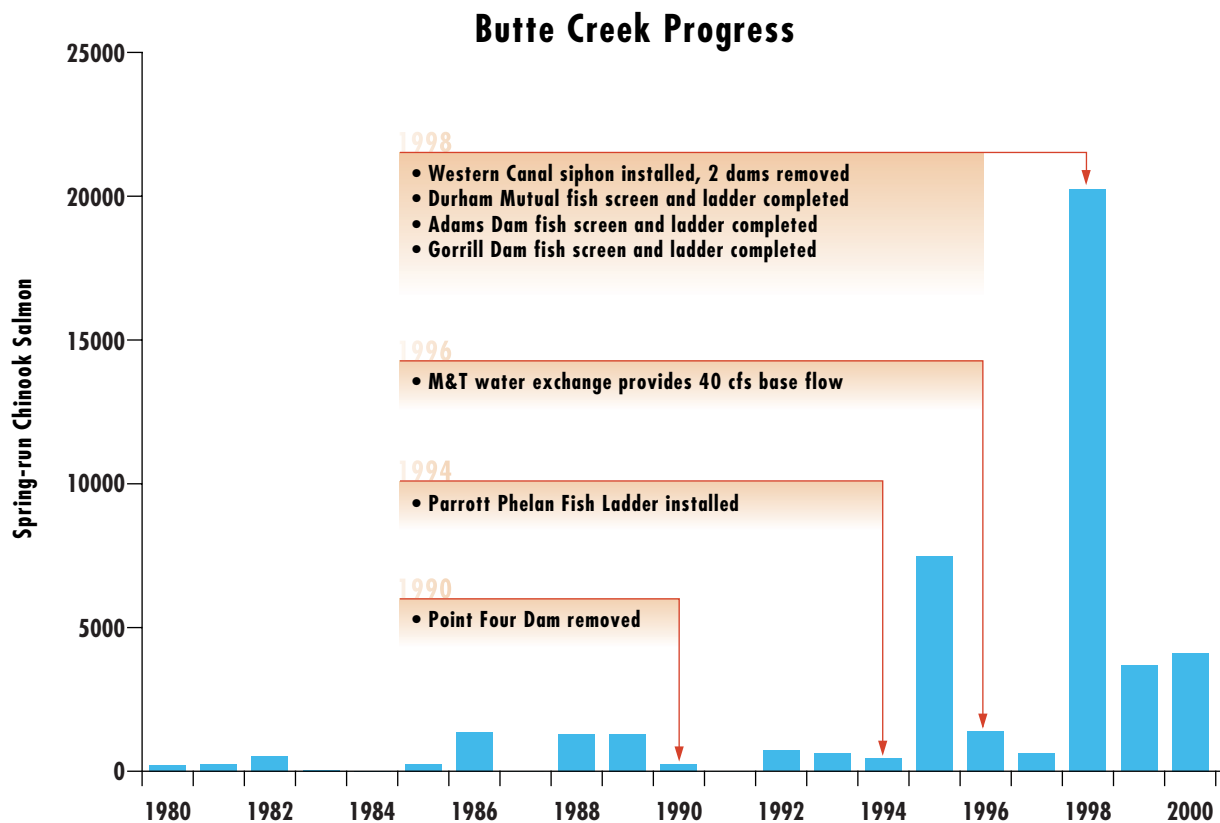
- Established a “single blueprint” or framework for coordinating resource management, conservation and regulatory actions between state and federal agencies.
- Funded 326 projects to date at a cost of \$336 million. All proposed projects are subject to a competitive solicitation process and reviewed by technical and scientific teams.
- Begin fish passage improvements along 182 river miles of three streams (Battle, Butte and Clear creeks) and three rivers (Cosumnes, Guadalupe and Mokelumne).
- Installed 64 fish screens to protect fish at diversion points throughout the Bay-Delta system.
- Conducted 23 studies at \$26.5 million on the effects of dissolved oxygen, mercury, pesticides, selenium and dissolved organic carbon on the Bay-Delta system.

## Public and Peer Review:

- Agency Stakeholder Ecosystem Team provides technical oversight.
- Stakeholder and public oversight achieved through Ecosystem Roundtable.
- Independent Ecosystem Science Board comprised of 12 independent scientists monitors scientific integrity of program.
- Coordination and integration with other CALFED programs and agencies.

## Performance and Tracking

Performance measures for the Ecosystem Restoration Program are being developed and include: number of funded restoration projects to benefit at-risk fish species; number of restoration projects funded; acres of enhanced or protected habitat leading to improved ecological processes; population trends for listed fish species dependent on the Delta, and percentage of the volume of diverted water screened.



*This graphic shows an increase in Chinook salmon population trends on the Butte Creek that correlate with ecosystem restoration activities.*

## Environmental Water Account

Providing water at critical times is key to meeting ecosystem needs. Through its Environmental Water Account, CALFED is obtaining water and flexibility to benefit the environment and minimize water supply impacts on cities, farms and businesses.

### Goals:

- To reduce conflicts between environmental needs and water project operations by providing water and flexibility.
- To better protect fish and habitats at critical times by providing water that otherwise would not be available.
- To increase water supply reliability by allowing projects to meet environmental and water supply needs at the same time.

### Accomplishments:

- Established an interagency Environmental Water Account team to acquire, store and allocate water.
- Provided 287,000 acre-feet for environmental purposes without reducing allocations to farmers and cities.
- Farmers received assurances that their supplies would not be further reduced because of Endangered Species Act requirements.
- Continued work on acquisitions for the EWA in 2002.

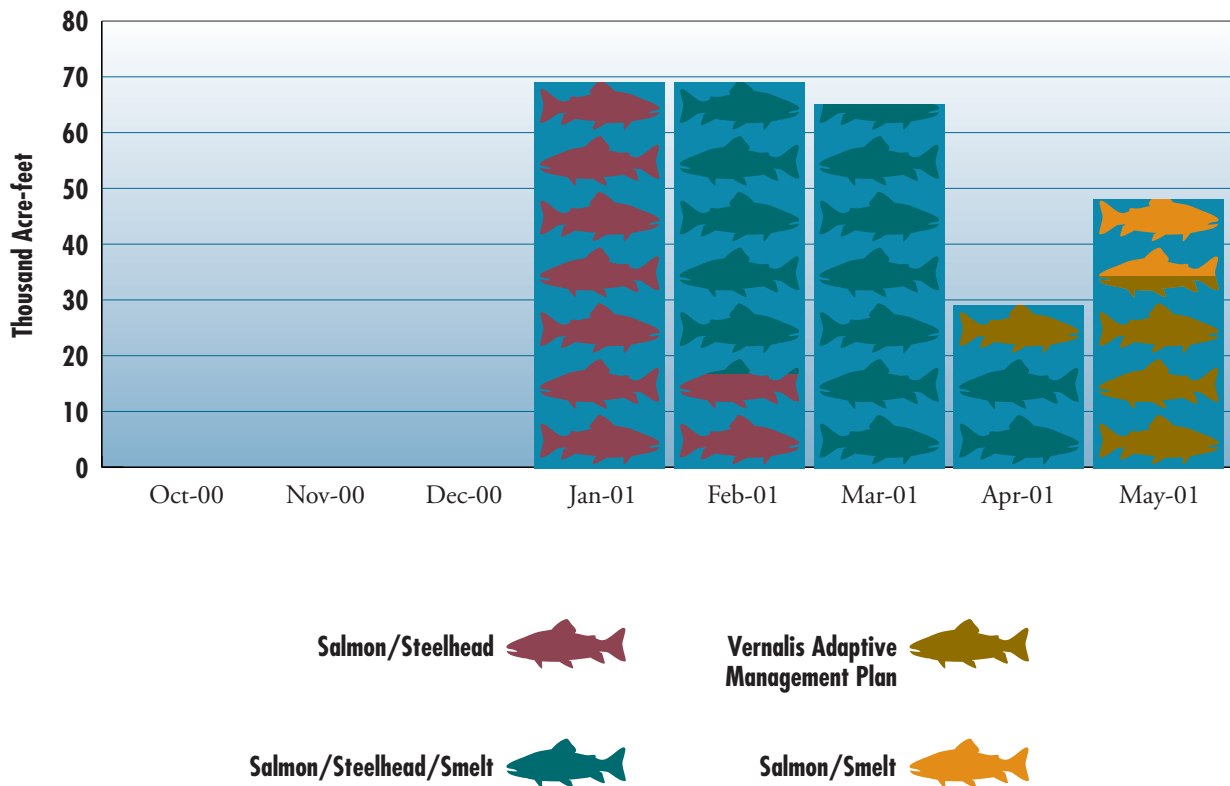
### Public and Peer Review:

- Scientific evaluation conducted each year to examine how much water was acquired, how it was used, and whether it had an impact.
- Ongoing review of EWA is provided by scientific advisors.
- EWA program is reviewed by CALFED member agencies as part of a cooperative management agreement.

## Performance and Tracking

Performance measures for the EWA may include: estimated affect on fish population levels because of use of EWA water and export reductions (by species); take of fish at the state and federal pumps; and estimated amount of EWA water used to help supplement reduced pumping and protect fish.

Water Year 2000-2001 **Environmental Water Account Usage**



## Watersheds

By providing financial and technical assistance for local watershed projects, CALFED aims to support projects that reduce water quality problems, restore and protect habitats, and improve water supply reliability.

The program also seeks to foster local leadership by encouraging landowners, community members, environmental organizations and local public agencies to come together on watershed projects.

### Goals:

- To assist local programs that help achieve CALFED's objectives.
- To promote integration and collaboration of watershed programs.

### Accomplishments:

- Developed 2001 grant program for locally based watershed projects. Program will fund over 50 projects at a cost of around \$19 million.
- Developed initial strategy to guide program through first three years.
- Formed Interagency Watershed Advisory Team to provide assistance to local watershed groups.
- Provided funding in coordination with the Ecosystem Restoration Program to support projects in more than 50 watersheds.
- Developed a Memorandum of Understanding to ensure better coordination between state and federal watershed programs.

### Public and Peer Review:

- All projects reviewed by Watershed Selection Committee that includes 17 representatives from member agencies.
- Additional review provided by Bay-Delta Advisory Council's Watershed Work Group.

### Performance and Tracking

Performance measures for the Watershed Program may include: total number of watershed assessments completed or supported through the Program; total number of new watershed programs formed or supported by the Program; number of workshops and training sessions supported by CALFED for local and tribal governments; and improved performance of watersheds, as measured by level, timing and variability of flows.

## Drinking Water Quality

The Drinking Water Program is unique in addressing water quality from source to tap in order to improve drinking water supplies for the 22 million Californians who rely on the Bay-Delta for all or part of their water.

### Goals:

- To improve the quality of water at its source.
- Seek advancements in treatment technology.
- Find innovative ways to manage and deliver water.
- Support health effects research and perform comprehensive monitoring and assessment of Bay-Delta drinking water quality.

### Accomplishments:

- Funded five projects in 2001 totaling \$2 million including:
  - The Salinity and Selenium Project to build a pilot plant to treat agricultural drainage and produce water for reuse.
  - The Bay Area Blending / Exchange study aimed at improving water quality by blending and exchanging source waters among water utilities.
  - A study of the sources and concentrations of contaminants in Bay-Delta water.
  - Studies exploring options for addressing drainage problems in the Delta.
- Developed solicitation and selection process for funding of up to an additional \$13.5 million in drinking water quality projects.
- Developed a Drinking Water Quality Improvement Strategy outlining specific actions and goals for Stage 1 of the implementation phase.
- Coordinated approval of Memorandum of Understanding among key state and federal agencies to coordinate actions to address water quality problems.

## Public and Peer Review

- Review by the Delta Drinking Water Council and Drinking Water Constituents Work Group.

## Performance and Tracking:

Performance measures may include: water quality as indicated by monitoring and testing at key points; frequency or occurrence of advanced treatment technologies at local treatment facilities; consumer water rates; and rate of compliance with drinking water standards and public health goals for utilities that rely on Bay-Delta water.



## Levee System Integrity

With its focus on improving Bay-Delta levees, CALFED is acting to protect water supplies needed for the environment, agriculture and urban uses by reducing the threat of levee failure and seawater intrusion.

### Goals:

- Improve levees to a higher standard for greater protection.
- Improve emergency response capabilities.
- Reduce conflicts between levee maintenance and habitat needs.
- Improve coordination of permit processes.
- Develop adequate and reliable funding for levee maintenance.

### Accomplishments:

- Improved Delta levees on over 50 Delta islands, resulting in better water quality protection and greatly enhanced habitat conditions.
- Began Delta Risk Management Strategy and developed an Emergency Management Plan.
- Continued work on Delta Dredge and Reuse Strategy.
- Developed a Memorandum of Understanding between agencies on the management of the levee program.

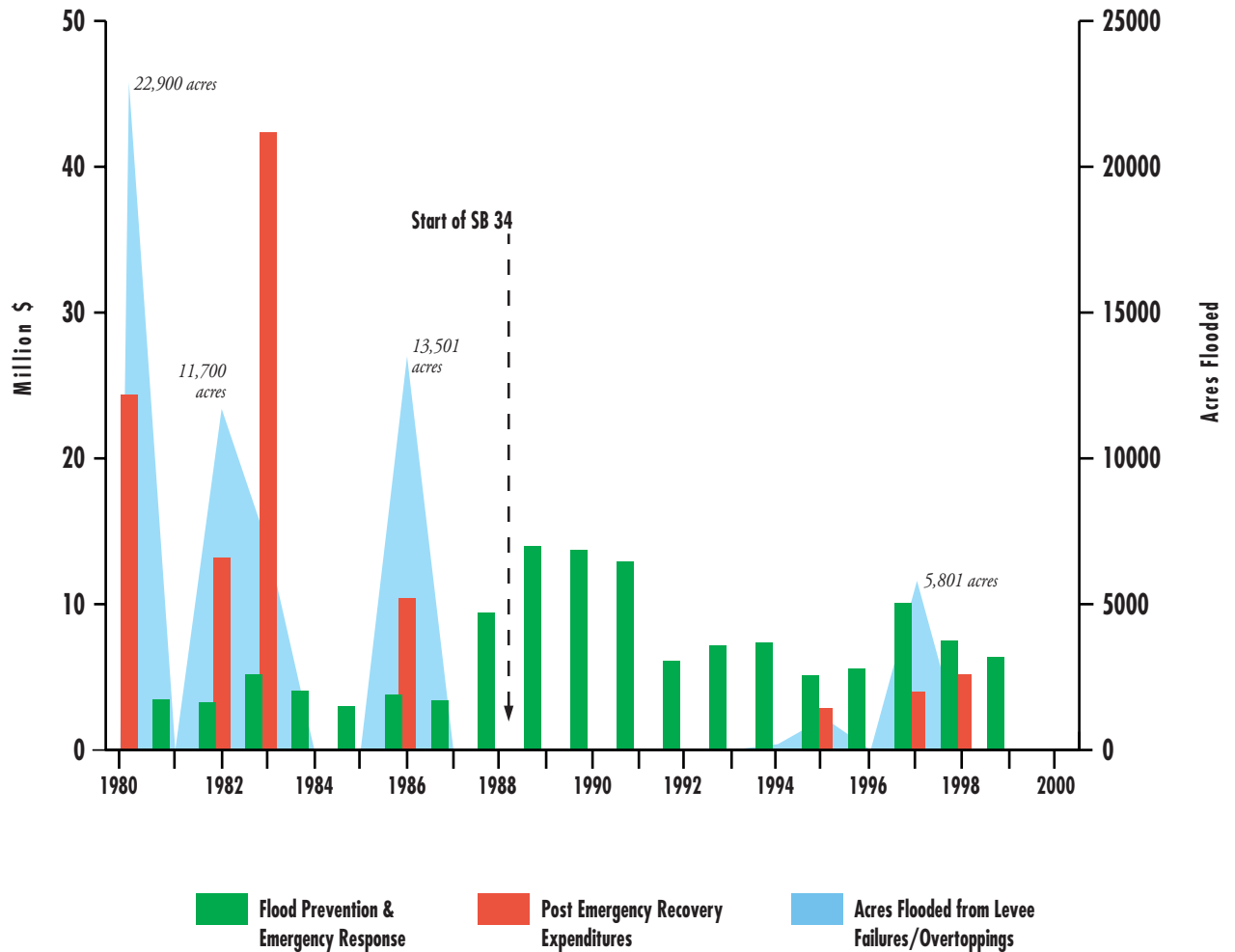
### Public and Peer Review:

- Levee work approved at the State Reclamation Board public meetings.
- Levee Program coordinated with stakeholders and peers through the Delta Levees and Habitat Advisory Committee and the Levees and Channels Technical Team.

### Performance and Tracking:

Performance measures may include: number of levees improved to specific standards; emergency funding and flood response equipment secured and available; and acres and frequency of land flooded.

### Delta Levee Flood Prevention Costs, Post Disaster Assistance Costs and Acres Flooded



Funds for Delta levees result in fewer requests for emergency funds and fewer acres flooded.

## CALFED Science Program

Integrating world-class science and peer review into every aspect of the Bay-Delta Program, CALFED is developing the best scientific information possible to guide decisions and evaluate actions.

### Goals:

- To establish a body of knowledge that is unbiased, relevant, authoritative and integrated, and communicate that knowledge to the scientific community, agency managers, stakeholders and the public.
- Incorporate independent peer review into all Program activities.
- Develop science-based performance measures for each CALFED program.

### Accomplishments:

- Hired a Lead Scientist, Dr. Sam Luoma, program manager and associate program manager.
- Developed directed research processes to identify and provide independent peer review of CALFED research needs.
- Developed plans for each program element to incorporate peer review into activities.
- Defined and compiled performance measures for each program area.
- Hosted the first CALFED Science Conference to engage the scientific community and the public.
- Began process to identify program-wide CALFED Science Board members.
- Identified science advisors for Environmental Water Account.
- Conducted a scientific workshop on the state of knowledge of Splittail at the request of the US Fish and Wildlife Service prior to taking listing action.
- Supported and integrated the activities of the independent ecosystem science board, inter agency ecological program, EWA science advisors, and other independent peer review efforts.
- Led the effort to develop an interagency science consortium to support common efforts to investigate and share information.

**Public and Peer Review:**

- Monitoring from peer review process.
- Public and stakeholder input through review processes.
- Review from Agency/Stakeholder Ecosystem Team.
- Public and scientific review and input through CALFED Science Conference.
- Department of Water Resources Environmental Specialists Conference and Technical Committee for Dredge Re-use.



## Program Accountability and Measuring Success

The Bay-Delta Program brings a high level of public accountability and visible measures of success.

Performance measures are used to translate program goals and objectives into measurable benchmarks of success. They present information on conditions, trends and their significance. The Program uses performance measures to:

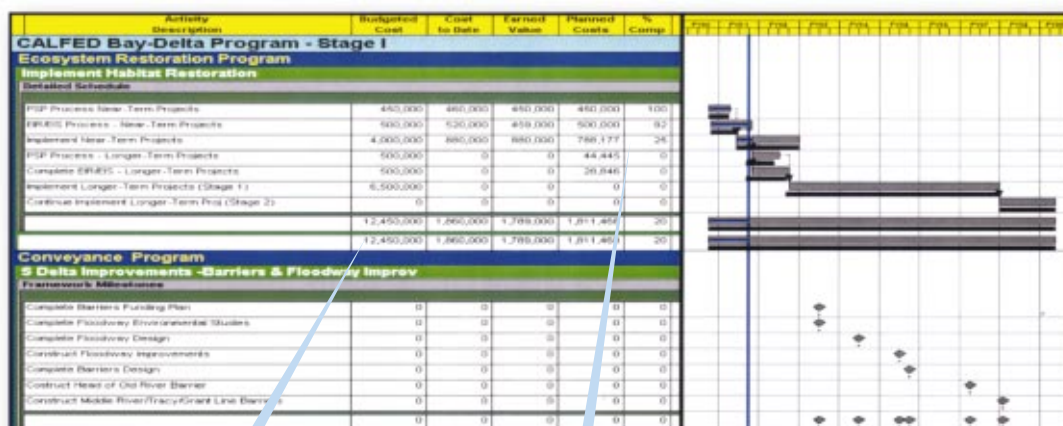
- Evaluate goals, progress and successes of restoration and management efforts.
- Increase technical understanding of problems and trends in the Bay-Delta System.
- Provide information which can help clarify management decisions.
- Inform the public and policy makers about the progress of the program.

### Goals:

- Comprehensive project tracking.
- Monitoring of each project's performance, cost and schedule.
- Measurable progress to assure balance across all elements of the Program.
- Monthly status information collected for every project.

### Accomplishments:

- Created and put in place a tracking system for evaluating and reporting on each individual program area.
- Developed preliminary performance measures with ongoing development coordinated with the Science Program.
- Crafted standard procedures for producing consistent data for each program area.



*The progression of every project is tracked by schedule, budget and accomplishments.*

*The Project Baseline Schedule includes the project milestones and funding.*

*An example of program and project tracking.*



## Regional View

Implementation of the CALFED Bay-Delta Program focuses on regional and local partnerships that provide local benefits while helping achieve overall Program objectives and commitments.







# CALFED BAY-DELTA PROGRAM

## SACRAMENTO VALLEY REGION





## The Sacramento Valley:

- Produces 60% or 22 million acre feet of the water flowing into the Delta
- Offers major habitat/spawning ground for many threatened and endangered fish species
- Contributes significantly to the state's farmlands and agricultural output



The Bay-Delta provides drinking water for 22 million people. It supports California's trillion-dollar economy, including its \$27 billion agricultural industry, and local homes and infrastructure. Implementation of the CALFED Bay-Delta Program focuses on regional and local partnerships that provide local benefits while helping achieve overall Program objectives and commitments.

## REPRESENTATIVE PROJECTS INCLUDE:

### WATER MANAGEMENT

- Evaluate enlargement of Shasta Dam
- Sites Reservoir Feasibility & Environmental Studies
- Anderson Cottonwood Irrigation District (ACID) Conjunctive Use Project
- Locally Controlled Groundwater Banking
- Reduced Sacramento River Diversions through Conservation

### WATER QUALITY

- Mercury Assessment – Clear Lake & Cache Creek

### ECOSYSTEM RESTORATION & FISH SCREEN/PASSAGE IMPROVEMENTS

- 47 Fish Screens and Passage Improvement Projects, including:
  - Anderson Cottonwood ID Fish Screen
  - Glenn Colusa ID Fish Screen
- Improve Red Bluff Diversion Facilities
- Lower American River Corridor Management Plan
- Battle Creek Fish Passage & Dam Removal
- Butte Creek Fish Passage & Dam Removal
- Saeltzer Dam Removal on Clear Creek
- Sacramento River Conservation Area

### LOCAL WATERSHED PROGRAMS

- |                        |                |
|------------------------|----------------|
| – Antelope Creek       | – Mill Creek   |
| – Battle Creek         | – North Fork   |
| – Big Chico Creek      | – Pit River    |
| – Butte Creek          | – Salt Creek   |
| – Clear Creek          | – Sand Creek   |
| – Deer Creek           | – South Fork   |
| – Last Chance Creek    | – Sulfur Creek |
| – Lower American River | – Yuba River   |



## MAJOR OPPORTUNITIES

Through Local Partnerships:

- Increased surface storage to improve water management flexibility
- Ecosystem restoration – habitat restoration, floodplain management, fisheries enhancement and screened diversions
- Watershed restoration and management
- Source water quality improvements
- Improved groundwater management and conjunctive use
- Utilize Water Use Efficiency to improve water quality and increase stream flows

## YEAR 1 FUNDING

43 projects

\$12,587,729.00

The five regions are:

- The Sacramento Valley Region
- The San Joaquin Valley
- The Delta Region
- Southern California
- The Bay Region

## SCIENCE

Integrating world-class science and peer review into every aspect of the Bay-Delta Program, CALFED is developing the best scientific information possible to guide decisions and evaluate actions.

### Goals:

- To establish a body of knowledge that is unbiased, relevant, authoritative and integrated and communicate that knowledge to the scientific community, agency managers, stakeholders and the public.
- Incorporate independent peer review into all CALFED science activities.
- Develop science-based performance indicators for each CALFED Program area.

## COMPREHENSIVE TRACKING SYSTEM

The CALFED Plan is unique in bringing to the public a high level of accountability by providing visible measures of success. Performance measures are used to translate program goals and objectives into measurable benchmarks of program success. They present information on conditions, trends and their significance.

### Goals:

- Sophisticated project tracking system.
- Tracking of each project's performance, cost and schedules.
- Measurable progress to assure balance across all elements of the Program.
- Monthly status information collected for every project.

*The Project Baseline Schedule includes the project milestones and funding.*

Activity Description	Budgeted Cost	Cost to Date	Earned Value	Planned Costs	% Comp.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>CALFED Bay-Delta Program - Stage I</b>																
<b>Ecosystem Restoration Program</b>																
Implement Habitat Restoration	450,000	450,000	450,000	450,000	100											
Complete Floodway Environmental Studies	400,000	520,000	459,000	500,000	82											
Complete Floodway Design	4,000,000	600,000	600,000	700,177	25											
Construct Floodway Improvements	500,000	0	0	44,445	0											
Complete Barriers Design	500,000	0	0	20,000	0											
Implement Longer-Term Projects (Stage 1)	6,000,000	0	0	0	0											
Continue Implement Longer-Term Proj (Stage 2)	0	0	0	0	0											
	12,450,000	1,050,000	1,709,000	1,811,450	20											
	12,450,000	1,050,000	1,709,000	1,811,450	20											
<b>Conveyance Program</b>																
<b>5 Delta Improvements - Barriers &amp; Floodway Improv</b>																
<b>Framework Milestones</b>																
Complete Barriers Funding Plan	0	0	0	0	0											
Complete Floodway Environmental Studies	0	0	0	0	0											
Complete Floodway Design	0	0	0	0	0											
Construct Floodway Improvements	0	0	0	0	0											
Complete Barriers Design	0	0	0	0	0											
Construct Head of Old River Barrier	0	0	0	0	0											
Construct Middle River/Trajectory/Grand Line Barriers	0	0	0	0	0											
	0	0	0	0	0											

*The progression of every project is tracked by schedule, budget and accomplishments.*

## CALFED BAY-DELTA PROGRAM

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*The CALFED Bay-Delta Program is a collaborative effort to:*

- Provide a reliable supply of high quality water;
- Establish a science-based approach to water management decisions;
- Restore the ecosystem



# CALFED BAY-DELTA PROGRAM

## DELTA REGION



## The Delta Region:

- 47% of the state's runoff is diverted from the Delta for beneficial uses
- Supports 750 plant and animal species
- Diversion point for irrigation water to California's \$27 billion agricultural industry
- Supports 120 fish species, including 80 percent of the state's commercial salmon fisheries
- Contains the largest wetland habitat in the western United States



*Yolo Bypass Habitat Restoration*



*(Tracy Fish Facility)*

*McCormack Williamson Tract  
Habitat Restoration*

*Delta Cross Channel and Through  
Delta Facility Operational Studies*



*Sub-Surface Drip  
Irrigation on Asparagus*

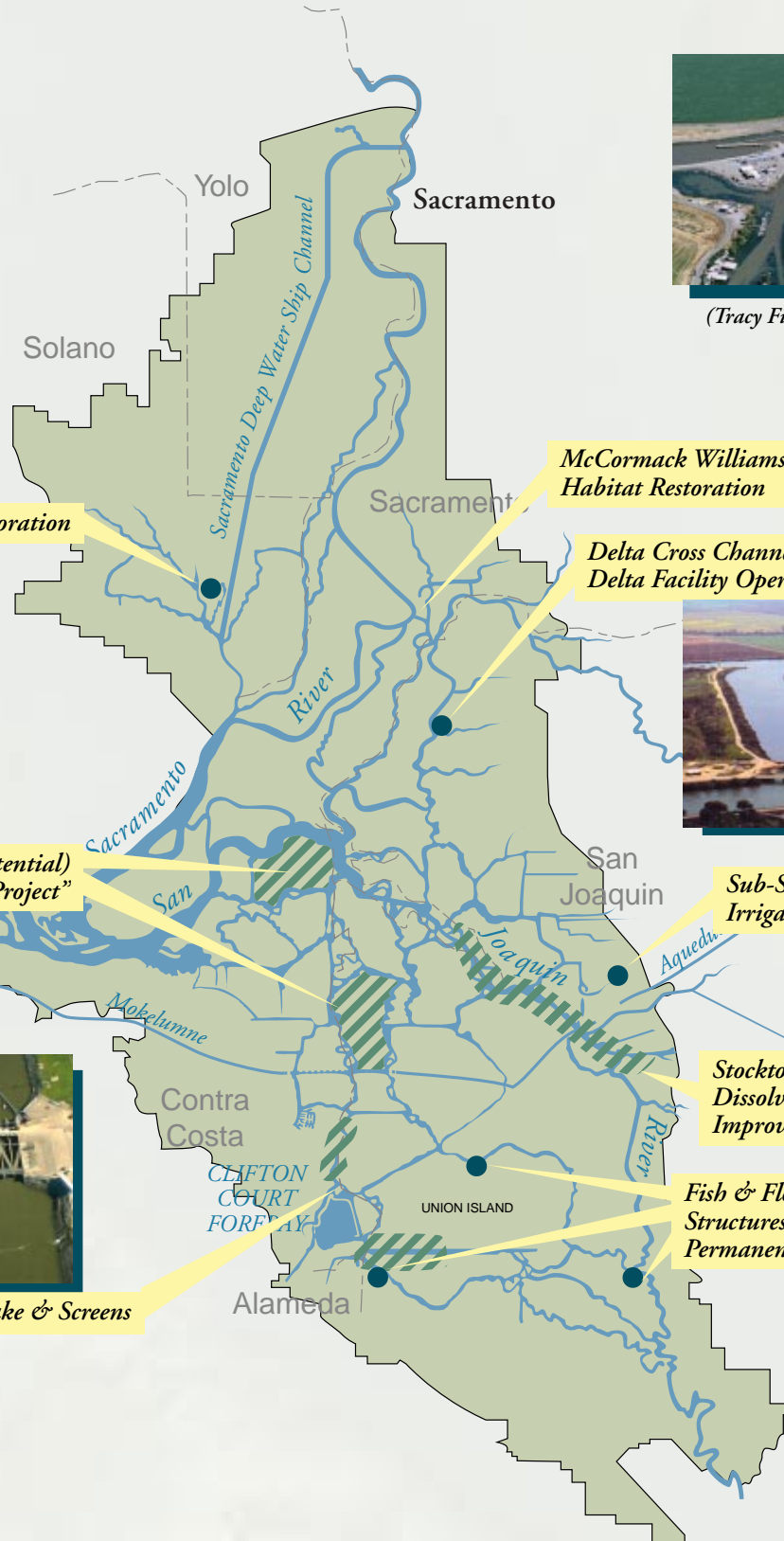
*Stockton Deep Water  
Dissolved Oxygen  
Improvement*

*Fish & Flow Control  
Structures (Temporary /  
Permanent) & Dredging*

*In Delta Storage (Potential)  
"Delta Wetlands Project"*



*Clifton Court Fish Intake & Screens*



The Bay-Delta provides drinking water for 22 million people. It supports California's trillion-dollar economy, including its \$27 billion agricultural industry, and local homes and infrastructure. Implementation of the CALFED Bay-Delta Program focuses on regional and local partnerships that provide local benefits while helping achieve overall Program objectives and commitments.

## **REPRESENTATIVE PROJECTS INCLUDE:**

### **WATER MANAGEMENT:**

Implement North & South Delta Improvements

- Tracy Fish Test Facility
- Clifton Court Fish Intake & Screens
- Barriers (Temporary/Permanent) & Dredging
- Construct CVP/SWP Intertie
- Fund Environmental Water Account
- Drip Irrigation on Asparagus

### **IN-DELTA STORAGE:**

- Potential In-Delta Storage ("Delta Wetlands")

### **WATER QUALITY:**

- Delta Cross Channel Gate Studies
- Stockton Deep Water Dissolved Oxygen Improvement
- Old River & Rock Slough Water Quality Actions
- South Delta Recirculation Study

### **ECOSYSTEM RESTORATION:**

- Cosumnes River Floodplain Acquisition & Restoration
- Yolo Bypass Habitat Restoration
- In-Channel Island Restoration Pilot Study
- Tyler Island Levee Protection & Habitat Restoration
- Woodbridge Fish Screen & Passage Project (Mokelumne)
- Stone Lakes National Wildlife Refuge

### **LOCAL WATERSHED MANAGEMENT PROGRAMS:**

- Calaveras River Watershed Management Implementation
- Lower Mokelumne River Watershed Education Project
- McCormack Williamson Tract Habitat Restoration

### **LEVEE PROTECTION:**

- Levee Stabilization on Twitchell, Bradford, Bethel, Webb, Van Sickle & Hotchkiss Island
- Levee Setback on Twitchell Island
- Emergency Response Program
- Beneficial Reuse of Dredged Materials
- Twitchell Island Subsidence Study

## **MAJOR OPPORTUNITIES**

Through Local Partnerships:

- Increase pumping capacity and operational flexibility to improve water supply reliability
- Improve conveyance through the Delta
- Evaluate potential for in-Delta storage
- Improve flood protection through levee improvements
- Implement ecosystem restoration projects through local partnerships
- Improve agricultural and urban water quality by reducing agricultural drainage

---

## **YEAR 1 FUNDING**

**19 Projects**

**\$5,916,272.00**

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The five regions are:

- The Sacramento Valley Region
- The San Joaquin Valley
- The Delta Region
- Southern California
- The Bay Region

## SCIENCE

Integrating world-class science and peer review into every aspect of the Bay-Delta Program, CALFED is developing the best scientific information possible to guide decisions and evaluate actions.

### Goals:

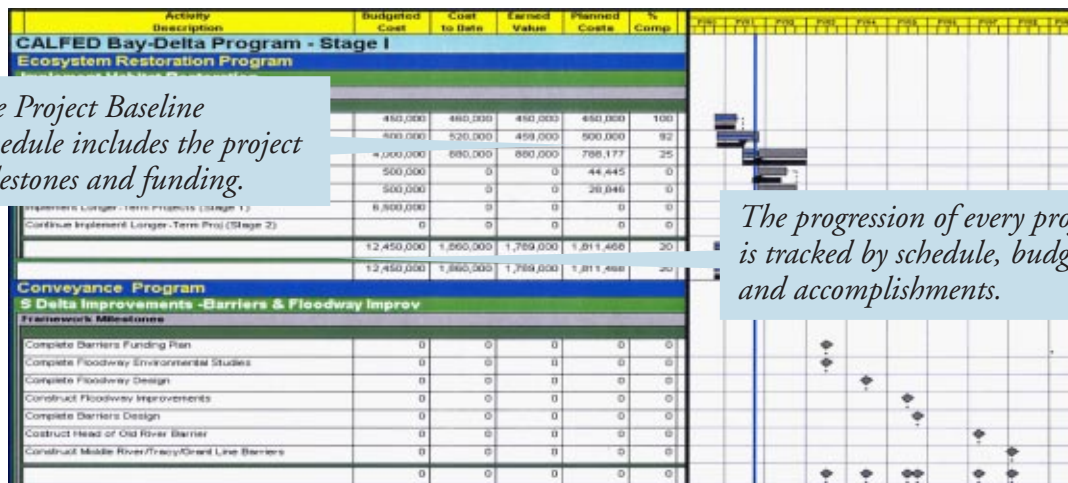
- To establish a body of knowledge that is unbiased, relevant, authoritative and integrated and communicate that knowledge to the scientific community, agency managers, stakeholders and the public.
- Incorporate independent peer review into all CALFED science activities.
- Develop science-based performance indicators for each CALFED Program area.

## COMPREHENSIVE TRACKING SYSTEM

The Bay-Delta Program is unique in bringing a high level of public accountability providing visible measures of success. Performance measures are used to translate program goals and objectives into measurable benchmarks of program success. They present information on conditions, trends and their significance.

### Goals:

- Sophisticated state-of-the-art project tracking system.
- Tracking of each project's performance, cost and schedules.
- Measurable progress to assure balance across all elements of the Program.
- Monthly status information collected for every project.

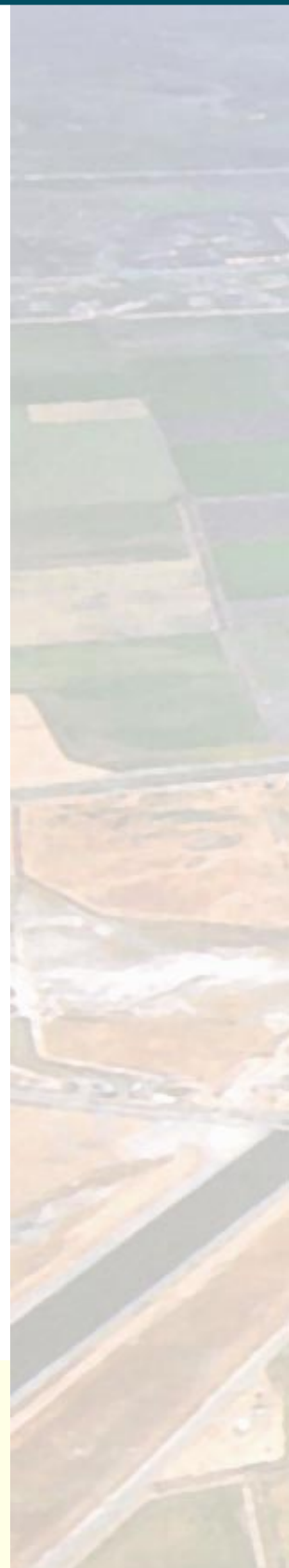


## CALFED BAY-DELTA PROGRAM

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The CALFED Bay-Delta Program is a collaborative effort to:

- Provide a reliable supply of high quality water;
- Establish a science-based approach to water management decisions;
- Restore the ecosystem





# CALFED BAY-DELTA PROGRAM

## BAY REGION





### The Bay Region:

- Forms the coast's largest estuary
- Drains more than 40% of the state's water
- Forms centerpiece for America's fourth largest metropolitan area

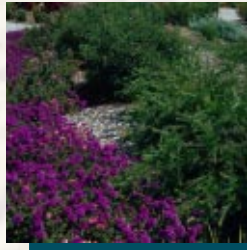


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## REPRESENTATIVE PROJECTS INCLUDE:

### WATER MANAGEMENT

- Bay-Area Blending and Exchange Project
- Los Vaqueros Expansion
- San Luis Bypass Project
- Ultra Low Flow Toilet Rebates
- High Efficiency Clothes Washer Program
- North Bay Aqueduct Water Quality Improvements



### ECOSYSTEM RESTORATION

- Napa River Floodplain Restoration
- Petaluma Marsh Restoration
- Benicia Waterfront Restoration
- Baypoint Shoreline Restoration
- Hamilton Wetlands/Bel Marin Keys Restoration
- Suisun Marsh Fish Screens
- Cullinan Ranch Project
- Suisun Marsh Management and Restoration



### LOCAL WATERSHED PROGRAMS

- San Pablo Bay
- Napa River
- Sonoma Creek
- Petaluma River
- Alhambra Creek
- Corte Madera Creek
- Guadalupe River
- Yosemite Creek
- San Francisquito Creek
- Codornices Creek



## MAJOR OPPORTUNITIES

Through Local Partnerships:

- Develop cooperative projects between Bay Area water districts to improve flexibility, water quality, and water supply reliability
- Provide storage and diversion capacity to capture and manage high-quality source water
- Enhance Bay Area urban water quality, reliability and flexibility through conservation, recycling, transfers, interconnections and potential surface storage
- Control introduced plant and animal species
- Support new drinking water treatment technologies
- Construct a San Luis Reservoir bypass to improve water supply reliability
- Restore wetlands and riparian habitat
- Reduce contaminants impacting the environment
- Increase available water supply through increased water use efficiency

## YEAR 1 FUNDING

**17 projects**

**\$5,916,354.00**



The five regions are:

- The Sacramento Valley Region
- The San Joaquin Valley
- The Delta Region
- Southern California
- The Bay Region

## SCIENCE

Integrating world-class science and peer review into every aspect of the Bay-Delta Program, CALFED is developing the best scientific information possible to guide decisions and evaluate actions.

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- Develop science-based performance indicators for each CALFED Program area.

## COMPREHENSIVE TRACKING SYSTEM

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- Measurable progress to assure balance across all elements of the Program.
- Monthly status information collected for every project.

*The Project Baseline Schedule includes the project milestones and funding.*

*The progression of every project is tracked by schedule, budget and accomplishments.*

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<b>CALFED Bay-Delta Program - Stage I</b>															
<b>Ecosystem Restoration Program</b>															
Implement Habitat Restoration	480,000	480,000	480,000	480,000	100										
Complete Floodway Environmental Studies	400,000	520,000	459,000	500,000	82										
Complete Floodway Design	4,000,000	600,000	600,000	788,177	25										
Construct Floodway Improvements	500,000	0	0	44,645	0										
Complete Barriers Design	500,000	0	0	28,846	0										
Implement Longer-Term Projects (Stage 1)	8,900,000	0	0	0	0										
Continue Implement Longer-Term Proj (Stage 2)	0	0	0	0	0										
	12,450,000	1,000,000	1,709,000	1,811,466	20										
	12,450,000	1,000,000	1,709,000	1,811,466	20										
<b>Conveyance Program</b>															
<b>5 Delta Improvements - Barriers &amp; Floodway Improv</b>															
<b>Framework Milestones</b>															
Complete Barriers Funding Plan	0	0	0	0	0										
Complete Floodway Environmental Studies	0	0	0	0	0										
Complete Floodway Design	0	0	0	0	0										
Construct Floodway Improvements	0	0	0	0	0										
Complete Barriers Design	0	0	0	0	0										
Construct Head of Old River Barrier	0	0	0	0	0										
Construct Middle River/Francis/Great Line Barriers	0	0	0	0	0										
	0	0	0	0	0										

## CALFED BAY-DELTA PROGRAM

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CALFED  
BAY-DELTA  
PROGRAM

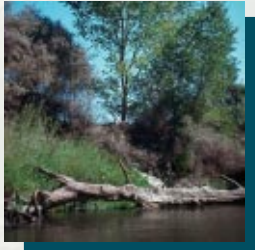
# SAN JOAQUIN VALLEY





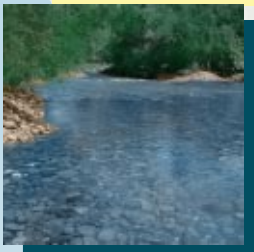
## The San Joaquin Valley:

- Produces 45% of the nation's fruits and vegetables
- Has seven major Sierra Nevada rivers draining in to it
- Anticipates population to double over the next 20 years



**San Joaquin Valley Regional  
Drainage Management**

**Merced River Restoration**



**Bear Creek Floodplain Restoration**

**Columbia Canal Company  
Irrigation Systems Improvement**



**Lost Hills Canal Lining**

**Tuolumne River Restoration**

- **Friant-MWD Water Quality Exchange Program**
- **San Joaquin River Restoration**
- **San Joaquin Surface Storage Feasibility Studies**

**Kern-Tulare Canal  
Automation Project**



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## REPRESENTATIVE PROJECTS INCLUDE:

### WATER MANAGEMENT

- Friant-MWD Water Quality Exchange Program
- San Joaquin River Restoration
- San Joaquin Surface Storage Feasibility Studies
- Lost Hills Canal Lining
- Del Puerto Water District Water Irrigation Systems Improvement
- Columbia Canal Company Irrigation Systems Improvement
- San Joaquin Valley Regional Drainage Management
- Westside Integrated Resources Plan
- On-Farm Irrigation Improvements
- Kern-Tulare Conjunctive Use Project
- North San Joaquin Water Conservation District Pilot Recharge Project
- Stockton East Water District Farmington Groundwater Recharge & Wetlands
- Westlands Water District Conjunctive Use & Groundwater Recharge Project

### WATER QUALITY

- Bacterial Treatment of Selenium in Panoche Drainage

### ECOSYSTEM RESTORATION

- Stanislaus River Habitat Restoration
- Develop Full Water Supply for Refuges & Managed Wetlands
- San Joaquin River National Wildlife Refuge
- Merced River Restoration
- Tuolumne River Restoration
- Bear Creek Floodplain Restoration

### LOCAL WATERSHED PROGRAM

- Panoche-Silver Creek
- Arroyo Pasajero Creek
- Tuolumne River
- Upper San Joaquin River

## MAJOR OPPORTUNITIES

Through Local Partnerships:

- Increased surface storage to improve water management flexibility
- Ecosystem restoration – habitat restoration, floodplain management, fisheries enhancement and screened diversions
- Watershed restoration and management
- Source water quality improvements
- Improved groundwater management and conjunctive use
- Water use efficiency to increase available water supply, improve water quality and increase stream flow

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## YEAR 1 FUNDING

**39 Projects**

**\$24,423,489.00**

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The five regions are:

- The Sacramento Valley Region
- The San Joaquin Valley
- The Delta Region
- Southern California
- The Bay Region

## SCIENCE

Integrating world-class science and peer review into every aspect of the Bay-Delta Program, CALFED is developing the best scientific information possible to guide decisions and evaluate actions.

### Goals:

- To establish a body of knowledge that is unbiased, relevant, authoritative and integrated and communicate that knowledge to the scientific community, agency managers, stakeholders and the public.
- Incorporate independent peer review into all CALFED science activities.
- Develop science-based performance indicators for each CALFED Program area.

## COMPREHENSIVE TRACKING SYSTEM

The CALFED Plan is unique in bringing to the public a high level of accountability by providing visible measures of success. Performance measures are used to translate program goals and objectives into measurable benchmarks of program success. They present information on conditions, trends and their significance.

### Goals:

- Sophisticated project tracking system.
- Tracking of each project's performance, cost and schedules.
- Measurable progress to assure balance across all elements of the Program.
- Monthly status information collected for every project.

*The Project Baseline Schedule includes the project milestones and funding.*

*The progression of every project is tracked by schedule, budget and accomplishments.*

Activity Description	Budgeted Cost	Cost to Date	Earned Value	Planned Costs	% Comp.	P00	P01	P02	P03	P04	P05	P06	P07	P08	P09
<b>CALFED Bay-Delta Program - Stage I</b>															
<b>Ecosystem Restoration Program</b>															
Complete Delta Water Quality Study	450,000	450,000	450,000	450,000	100										
Complete Delta Water Quality Study	450,000	520,000	459,000	500,000	82										
Complete Delta Water Quality Study	4,000,000	600,000	600,000	700,177	25										
Complete Delta Water Quality Study	500,000	0	0	44,645	0										
Complete Delta Water Quality Study	500,000	0	0	20,846	0										
Implement Longer-Term Projects (Stage 1)	8,500,000	0	0	0	0										
Continue Implement Longer-Term Proj (Stage 2)	0	0	0	0	0										
	12,450,000	1,050,000	1,709,000	1,811,468	20										
	12,450,000	1,050,000	1,709,000	1,811,468	20										
<b>Conveyance Program</b>															
<b>5 Delta Improvements - Barriers &amp; Floodway Improv</b>															
<b>Framework Milestones</b>															
Complete Barriers Funding Plan	0	0	0	0	0										
Complete Floodway Environmental Studies	0	0	0	0	0										
Complete Floodway Design	0	0	0	0	0										
Construct Floodway Improvements	0	0	0	0	0										
Complete Barriers Design	0	0	0	0	0										
Construct Head of Old River Barrier	0	0	0	0	0										
Construct Middle River/Francis/Great Line Barriers	0	0	0	0	0										
	0	0	0	0	0										

## CALFED BAY-DELTA PROGRAM

1416 9th St., Suite 1155  
Sacramento, CA 95814  
(916) 657-2666  
<http://calfed.ca.gov>

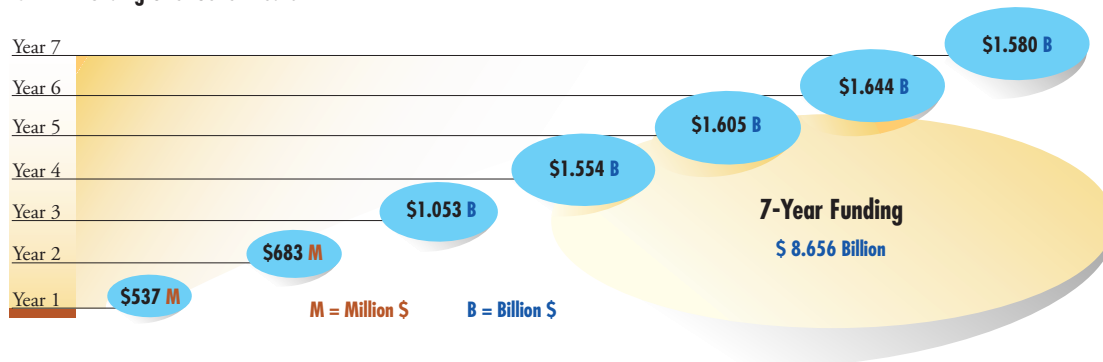
The CALFED Bay-Delta Program is a collaborative effort to:

- Provide a reliable supply of high quality water;
- Establish a science-based approach to water management decisions;
- Restore the ecosystem.

## Fiscal Information

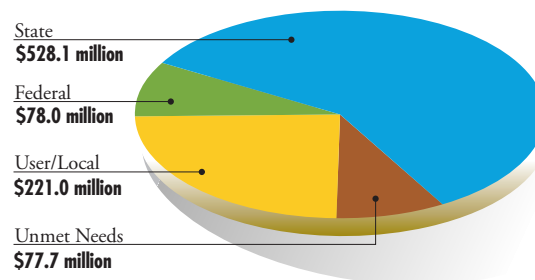
The projected expenditures and cost-sharing for the CALFED Program through Stage 1, taken from the Record of Decision, is adjusted annually based on the funds appropriated and available for the Program. Proposed expenditures in Years 5-7 are tentative and will be determined after ongoing evaluation of the effectiveness of the program investments during Year 1-4 of Stage 1. This information does not include the cost for CALFED Program Oversight and Coordination estimated to be approximately \$17 million per year. ( See Table 1 )

**CALFED Funding Over Seven Years**



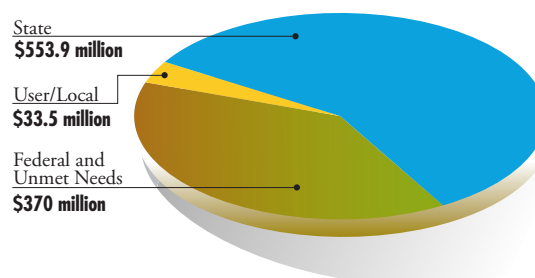
The Year 1 (Federal Fiscal Year 2001) CALFED funding by Program Element and funding source, state funding for Year 1, was over \$500 million, primarily from bond funds. First year funding has increased in some program elements because of increased first year costs such as the Environmental Water Account (EWA), or projects ahead of schedule such as the Tracy Fish Test Facility under the Conveyance Program. ( See Table 2 )

**Year 1 Funding**



The Year 2 (Federal Fiscal Year 2002) CALFED funding by Program Element and funding source, state funding for the Year 2, is expected to be \$554 million, primarily from bond funds. To meet the schedule in the Record of Decision, an additional \$370 million is needed. (See Table 3)

**Year 2 Funding**



**Table 1**  
**CALFED Bay-Delta Program**  
**Stage 1 Projected Expenditures**  
(\$ in millions)

Program Element	Program Year(s)							Total	Cost Sharing	
	1	2	3	4	5	6	7		Fed	State
Ecosystem Restoration <sup>1</sup>	\$235	\$198	\$163	\$168	\$220	\$218	\$218	\$1,420	\$510	\$510
Environmental Water Account	\$50	\$50	\$50	\$50				\$200	\$100	\$100
Water Use Efficiency	\$31	\$62	\$299	\$641	\$641	\$641	\$641	\$2,956	\$759	\$759
Water Transfers	\$3	\$3	\$3	\$2	\$2	\$1	\$1	\$15	\$7.5	\$7.5
Watershed <sup>2</sup>	\$40	\$45	\$45	\$45	\$45	\$40	\$40	\$300	\$138	\$138
Drinking Water Quality <sup>3</sup>	\$41	\$78	\$82	\$110	\$116	\$120	\$128	\$675	\$200	\$200
Levees <sup>4</sup>	\$33	\$76	\$78	\$82	\$45	\$65	\$65	\$444	\$142	\$88
Storage <sup>5</sup>	\$50	\$75	\$138	\$208	\$266	\$349	\$339	\$1,425	\$237	\$237
Conveyance <sup>6</sup>	\$29	\$66	\$150	\$198	\$220	\$160	\$98	\$921	\$188	\$381
Science	\$25	\$30	\$45	\$50	\$50	\$50	\$50	\$300	\$150	\$150
<b>Total</b>	<b>\$537</b>	<b>\$683</b>	<b>\$1,053</b>	<b>\$1,554</b>	<b>\$1,605</b>	<b>\$1,644</b>	<b>\$1,580</b>	<b>\$8,656</b>	<b>\$2,432</b>	<b>\$2,571</b>

<sup>1</sup> Proposed cost sharing for the ERP is a split between users (~\$35 million per year from a new broad-based fee & \$15 million per year in CVPIA Restoration Funds), and public dollars (assumed split equally between federal and state sources of funding). This Table assumes revenues from new broad based fees would become available beginning in 2003.

<sup>2</sup> Cost shares include a 10% contribution from locals for community based watershed activities, with the rest funded equally between federal & state sources.

<sup>3</sup> In general cost sharing is assumed to be 50/50 fed/state or 33/33/33 fed/state/user, depending on the action. Some water quality actions assume federal and state funding in the initial 2 years, with 100% of the funding in latter years from users.

<sup>4</sup> Total cost includes the Suisun Marsh Levee Program, which provides substantial ecosystem, water quality, and flood control benefits. Cost shares do not include this Program.

<sup>5</sup> Initial funding will be largely state and federal sources. The cost share for surface storage construction has not been determined. Final cost shares (including reimbursements by beneficiaries) will depend on allocation of costs and identification of beneficiaries for individual projects. Cost sharing for full-scale groundwater storage projects assumes a 50% local match.

<sup>6</sup> Total includes rough estimate for construction of the San Luis Reservoir Low Point Project, but cost sharing is not included because cost shares have not been determined.

**Table 2**  
**CALFED Bay-Delta Program**  
**Year 1 Funding By Source**  
(\$ in millions)  
July 3, 2001

Program Element	Year 1 Funding	State Funding <sup>1</sup>						Federal Funding <sup>2</sup>						User/Local Funding		Unmet Needs
		GF	Prop 204	Prop 13	SWP	Other State	State Subtotal <sup>3</sup>	Bay Delta Act	USBR W&RR	CVPIA RF	USACE	Other Fed	Federal Subtotal <sup>3</sup>	Local <sup>4</sup>	User/Local Subtotal	
Ecosystem Restoration	\$235	\$1.3	\$138.2	\$46.2	\$3.7	\$6.1	\$195.5		\$3.5	\$17.1	\$0.4	\$6.3	\$27.3	\$13.5	\$13.5	
Environmental Water Account	\$81	\$59.0					\$59.0	\$10.0					\$10.0			\$12.0
Water Use Efficiency	\$62	\$18.1		\$18.2			\$36.3		\$25.7				\$25.7	\$204.5	\$204.5 <sup>5</sup>	
Water Transfers	\$2.6	\$0.5					\$0.5									\$2.1
Watershed	\$40	\$18.7	\$1.3				\$20.0									\$20.0
Drinking Water Quality	\$48	\$13.5		\$24.0			\$37.5									\$10.3
Levees	\$33		\$1.7	\$28.5			\$30.2				\$0.3		\$0.3	\$3.0	\$3.0	
Storage	\$94	\$23.3		\$69.0			\$92.3		\$1.7				\$1.7			
Conveyance	\$44	\$4.2		\$4.8	\$9.2		\$18.2		\$4.6				\$4.6			\$21.2
Science	\$38	\$13.0			\$5.6	\$1.7	\$20.3		\$4.0	\$0.5		\$1.2	\$5.7			\$12.1
CALFED Program Oversight & Coordination	\$21	\$15.9	\$2.5				\$18.4	\$2.7					\$2.7			
<b>Total</b>	<b>\$699</b>	<b>\$167.5</b>	<b>\$143.7</b>	<b>\$190.7</b>	<b>\$18.5</b>	<b>\$7.8</b>	<b>\$528.1</b>	<b>\$12.7</b>	<b>\$39.5</b>	<b>\$17.6</b>	<b>\$0.7</b>	<b>\$7.5</b>	<b>\$78.0</b>	<b>\$221.0</b>	<b>\$221.0</b>	<b>\$77.7</b>

<sup>1</sup> State funding sources include General Fund (GF), bond funds (Proposition 204 & Proposition 13), State Water Project funds (SWP), and other state funding sources (Other State). Other State includes State matching funds for projects funded through the ERP 2001 Proposal Solicitation Package (\$6.1m) and Interagency Ecological Program (IEP) funding (\$1.653m) from the Department of Fish & Game that contributes to the Science Program.

<sup>2</sup> Federal funding sources include California Bay Delta Act funds (Bay Delta Act), U.S. Bureau of Reclamation Water and Related Resources (USBR W&RR), Central Valley Project Improvement Act Restoration Funds (CVPIA RF), U.S. Army Corps of Engineers appropriations (USACE), and other federal sources (Other Fed). Other Fed includes Federal matching funds for projects funded through the ERP 2001 Proposal Solicitation Package (\$6.3m) and IEP funding from U.S. Fish & Wildlife Service (\$0.181), U.S. Geological Survey (\$0.715), and National Marine Fisheries Service (\$0.305) that contributes to the Science Program.

<sup>3</sup> State subtotal includes State Water Project Funds (\$18.5m) and federal subtotal includes CVPIA Restoration Funds (\$17.1m) that will count towards the user share. These fund sources are included in the Federal and State funding columns in this table because the funds are budgeted and appropriated through the federal and state governments.

<sup>4</sup> ERP amount includes local cost share for the 74 proposals recommended for funding this Year through the 2001 Proposal Solicitation Package. Levees amount includes 25% local cost share for levee subventions. Water Use Efficiency amount includes non-Federal funding for Title XVI water recycling programs/projects. Additional local contributions in other program areas will be estimated as information is available.

<sup>5</sup> USBR provided an estimate of \$204.5 million for local matching for water recycling projects. This amount will be verified to determine the amount that is contributing to CALFED objectives. Once the amount that contributes to CALFED objectives is known it will be added into the Year 1 total at that time.

**Table 3**  
**CALFED Bay-Delta Program**  
**Year 2 Funding By Source**  
(\$ in millions)  
July 3, 2001

Program Element	Year 2 Funding	State Funding <sup>1</sup>						Federal Funding <sup>2</sup>						User/Local Funding		Unmet Needs
		GF	Prop 204	Prop 13	SWP	Other State	State Subtotal <sup>3</sup>	USBR CALFED	USBR W&RR	CVPIA RF	USACE	Other Fed <sup>2</sup>	Federal Subtotal <sup>3</sup>	Local <sup>4</sup>	User/Local Subtotal	
Ecosystem Restoration <sup>5</sup>	\$198	\$2.8	\$141.8	\$10.0	\$7.3		\$161.9		\$2.2	\$19.5	\$1.2	\$3.1	\$26.0	\$14.0	\$14.0	\$43.5
Environmental Water Account	\$84	\$1.0	\$28.2	\$6.3			\$35.5	\$12.5					\$12.5			\$36.0
Water Use Efficiency	\$192.1	\$9.0		\$43.2		\$57.9	\$110.1		\$19.6			\$18.2	\$37.8	\$16.5	\$16.5	\$27.7
Water Transfers	\$2.6	\$0.9					\$0.9									\$1.7
Watershed	\$45	\$10.0		\$10.0			\$20.0									\$25.0
Drinking Water Quality	\$78	\$9.4		\$12.1			\$21.5									\$56.5
Levees	\$47.6	\$13.1	\$8.4		\$0.3		\$21.8				\$0.3		\$0.3	\$3.0	\$3.0	\$22.5
Storage	\$136.4	\$14.0		\$103.0			\$117.0									\$19.4
Conveyance	\$65.7	\$3.3		\$32.6	\$6.0		\$42.0		\$0.5	\$10.0			\$10.5			\$13.2
Science	\$44	\$7.7			\$6.2	\$2.5	\$16.4		\$3.9		\$0.2	\$1.4	\$5.5			\$22.1
CALFED Program Oversight & Coordination	\$17	\$6.9					\$6.9	\$7.5			\$0.1		\$7.6			\$2.5
<b>Total</b>	<b>\$910.4</b>	<b>\$78.2</b>	<b>\$178.4</b>	<b>\$217.1</b>	<b>\$19.8</b>	<b>\$60.4</b>	<b>\$553.9</b>	<b>\$20.0</b>	<b>\$26.2</b>	<b>\$29.5</b>	<b>\$1.8</b>	<b>\$22.7</b>	<b>\$100.2</b>	<b>\$33.5</b>	<b>\$33.5</b>	<b>\$270.1</b>

<sup>1</sup> State funding sources include General Fund (GF), bond funds (Proposition 204 & Proposition 13), State Water Project funds (SWP), and other state funding sources (Other State). Other State includes State Revolving Funds (\$57.9m) from the State Water Resources Control Board that contribute to the Water Use Efficiency Program and Interagency Ecological Program (IEP) funding (\$2.507m) from the Department of Fish & Game that contributes to the Science Program.

<sup>2</sup> Federal funding sources include U.S. Bureau of Reclamation funding identified in the President's Budget for CALFED (USBR- CALFED), U.S. Bureau of Reclamation Water and Related Resources (USBR W&RR), Central Valley Project Improvement Act Restoration Funds (CVPIA RF), U.S. Army Corps of Engineers appropriations (USACE), and other federal sources (Other Fed). Other Fed includes U.S. Fish and Wildlife Service funding that contributes to the Ecosystem Restoration Program (ERP- \$2.242m) and IEP funding (\$0.231m) that contributes to the Science Program, National Marine Fisheries Service funding that contributes to the ERP (\$0.81m) and Science Program (\$0.38m), IEP funding (\$0.782m) from U.S. Geological Survey, and U.S. Environmental Protection Agency funding (\$18.2m) that contributes to the Water Use Efficiency Program.

<sup>3</sup> State subtotal includes State Water Project funds (\$19.8m) and Federal subtotal includes CVPIA Restoration Funds (\$29.5m) that will count towards the user share. These fund sources are included in the Federal and State funding columns in this table because the funds are budgeted and appropriated through the federal and state governments.

<sup>4</sup> ERP and WUE amounts include estimates for local cost sharing for grant projects. Levees amount includes 25% local cost share for levee subventions. Additional local contributions in other program areas will be estimated as information is available.

<sup>5</sup> The State funding for ERP would be reduced if additional federal funding is provided.





CALFED  
BAY-DELTA  
PROGRAM

*1416 Ninth Street • Room 1155 • Sacramento • California 95814*

*Telephone: (916) 657-2666*

*<http://calfed.ca.gov>*